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## The Honeywell Plug-In Heat Regulator Package....



- Plug-in motor for quick, easy installation.
- Hydraulic action impulse pump; quiet in operation, startdily built for long life.
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- Fire protection: the motor automatically returns to closed position on power failure.
  - No external spring for simplified, tamper-proof protection.
- New thermostot: extremely accurate; designed for short regulated, fuel saving operations.
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at the ...



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#### IT SAVES YOU TIME

... Amazing simplicity of installation!

#### IT SAVES YOU TROUBLE

. . . Stops annoying call-backs!

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#### STRAND Garage Door Is Easier to Install and Easier to Paint!







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EASY OPERATING . . . ALWAYS . . . steel can't warp, shrink, rot or stick; hardware is dependable. Steel does not absorb moisture-weight of the door remains the same in hot or cold weather, for uniformly easy operation.

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Strand Doors are available in Canopy and Receding (track) types for 8' x 7' openings; and in a Double-Garage-Door (receding type) for 16' x 7' opening, anobstructed by center post. Order from your dealer, or mail the coupon for information and doaler's name.



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Solid oak with walnut pegs . Alternate 2¼" and 3¼" widths . New "Decorator" Finish

### Architects and interior decorators praise this distinctive new floor



Berram A. Weber, Chicago Archieux, says. The new Bruce Ronch Plank Floor impresses me as being very beattrial and practical. I consider it suitable for both traditional and modern architectural

modern architectural types. The interesting informality of this flux, with its random verifits and walvest years, is particularly grand for tumbling tumbers per homes,



Elizabeth Whitney, Chicago Decorator, saya: "Docoratively opeaking, the Banch Plank Fluor is a mol land for both traditional and modern interiors. The random widths

and another interiors. The random widths make it especially suitable for all Colonial and Provincial nyles. In modern record, the oak grain and walcout pegs contrast delightfully wish contemporary furnishings.



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#### Publisher's Page



#### "Welfare State" Losing Its Glamour

LL REPORTS show that most members of Congress resurned to Washington favoring reductions in government expenditures and were not only opposed to increases in taxes, but for reductions. After having conferred with his leaders in Congress, President Truman's messages have been less in favor of increases in taxes to balance the budget than they were a year ago.

This is significant and important. It is the effect of members of Congress visiting their constituents. It shows the people are learning the hard way — by experience — that they cannot have the supposed benefits of big government spending without everybody having to pay for them, directly or indirectly, in taxes. It indicates also that an increasing number are beginning to realize that the benefits they derive from government spending are less than they have to pay for them.

The most dangerous threat to the American political and economic system for almost 20 years has been widespread acceptance of the theory, first, during the depression that the government could spend us back to prosperity, and, second, that after prosperity had been attained huge government spending was necessary to maintain it.

The previous history of the coun-

try was disregarded by the New Deal when it adopted this theory seventeen years ago. The nation had then prospered and progressed, with some setbacks, for almost a century and a half, as no other nation ever did, without anybody ever seriously advocating government spending excepting to provide services which it was assumed could not and would not be provided by private enterprise. Then during the depression the policy of largely increased government spending was advocated and adopted to "prime the pump" and start a revival of production, distribution and employment by private enterprise. The theory did not work. After it had been tried seven years, business and employment in 1940 still showed little improvement

Then came preparations for and actual participation in war involving wholly inprecedented government expenditures. This created the appearance of prosperity, and the believers in huge government spending predicted a severe depression when spending was enormously reduced after the war. Their prediction failed of fulfillment. During the war there had accumulated, on the one hand, huge shortages of civilian goods, and, on the other hand, large buying power in the hands of both consumers and business; and prosperit

perity has been maintained in peacetime by the use of this accumulated buying power to remedy the short-

ages.

Government expenditures since the war, although greatly reduced, have been larger than ever before in peace-time, and are again increasing, causing the threat of increases in taxes to pay them. Many who thought big government expendi-tures would benefit them in the belief that taxes to defray them would have to be paid by corporations and the rich, are beginning to realize that they cannot evade their share of taxes and that the taxes they pay indirectly in prices, rentals and so on, are just as certainly deductions from their incomes as those they pay directly. Hence the theory of the socialistic "welfare state" involving government spending to benefit the many at the expense of the few is losing its glamour.

Winston Churchill once stated the case against both capitalism and socialism in a single sentence. He said: "The trouble with capitalism is that it causes inequality of wealth; the trouble with socialism is that it causes equality of poverty." Huge taxing and spending do not create a "welfare state" but a poor-

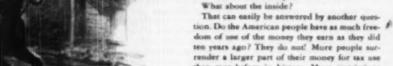
house state.

An increasing number of American voters are learning this.

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## A Command Performance



than ever before in history. More restrictions curb more people than ever before. More compulsion over the entire populace is advocated. It is a mounting trend becoming more inclusive every year. All of this is offered under the glib promise of liberating man from economic servitude—of a planned life—a total welfare.

The Communist trials in our country have been most revealing. Every day the press and radio tell us of new infiltration into high places. Nor have

the ranks of labor escaped.

So, we have the two threats...one from the outside and one from within.

It is doubtful that the American people are fearful that Communism will take over our country in the foreseeable future. It is doubtful too that they are unduly alarmed that Socialism as a method of government will replace our govern-

But, what they do not understand is that a creeping Socialistic pattern is apreading itself from within—that it can advance to a point from which there can be no retreat. Because this Socialistic pattern moves forward a little at a time, it is not spectacular enough to be recognized for the dangerous thing it is. It is no easy to accept glittering promises—broad generalities, that mask the eventual result.

So, what is to be done about it?

We believe the state of the nation calls for a Command Performance from Business—a performance to stop this creeping Socialistic pattern which threatens the freedom of all.

Why does business get the call? There are two reasons.

First, business should do this job because of its obligation to people. That is not a new contention at Ceco. For three years, Ceco has been advancing the thought that the prosperity and security of our nation are tied unremittingly to a four letter word W-O-R-K. Ceco has said and still says management must work mere at managing. We believe this job is the most important task in the over-all concept of management. It is

It was midnight some 175 years ago that a man ende through the countryside calling his neighbors to arms.

Freedom was at stake.

History with deadly finality records the outcome of the struggle set off by that ride—a struggle that ended in freedom for all the people of this country—a freedom we take too lightly today.

Maybe it's because 175 years is a long time and mone of us can remember that far back—maybe it's because we have gotten used to this thing called freedom—maybe it's because we have had it so long we can't imagine life without it—maybe we believe we just cannot lose it.

But we can!

Today, the threat against the freedom of the American people is as great as it was that memorable night 175 years ago. In some sense greater. Guns do not threaten us—not yet at least—but an idea, a plan, artfully disguised, promises us the "secure" life.

What will it cost? Not much-just our freedom.

Now, let's forego all the high sounding language and get down to cases. What threatens our freedom?

The threat is two-fold... from the outside and from within, It isn't hard to identify the danger from the outside. Some twenty years ago, the leaders of Communism and Socialism brought their threats into sharp focus when they declared their operating policies for the future. Both contained a simple philosophy. Bore from within—take a little at a time. Usurp high office—guide the evolution until it becomes complete.

Has any of that happened?

## for American Business

up to alert management to provide real security in the present, as well as the future, to prove that responsibility for economic welfare belongs in private, not in public hands.

The second reason is that business—husiness men—are the best qualified for the job because American business knows most about selling. Businesses grow because business men sell their product. Is merchandise more important than the system which produced it? Isn't the system worthy of our best selling talents too? Yes... Business must and should sell the idea that real security and freedom for all are possible only under a virile free enterprise system.

Business must expose the alluring misrepresentations that spawn the myth "you can get something for nothing." It must boldly proclaim the simple truism that welfare projects cost money-cost the people their own money. For government has no money except that which is given it by the people through taxes. It must show that excessive taxation is creating a competition to industry which is challenging its right to lead-its right to guarantee economic freedom to people. It must question the cost which could be more than money. Unchecked, taxes can bankrupt the people, bankrupt business, thus making it impossible for individuals acting in private capacities-for business, through free enterprise management-to provide jobs, improve working conditions, assure real security.

It was protest against excessive taxation that occasioned the midnight ride 175 years ago. Now, as then, the same danger threasens.

Yes, freedom is at stake!

Business must create a crusading attitude toward free enterprise. Here the problem is not simple. For lately, the people are taking lightly our system of private endeavor which has had a moving influence on life around the world and given us the highest living exendards ever. They are "going along" thinking little of where it leads. They are not yet alarmed. Therefore, averserved belief in that which we so causally call the American Way of Life must practically be revived. New vigor must fire appreciation of the system of individual effort and reward. There must be reaffermetion of faith in the dignity of man, in the real security to be found only in the individual acting in self-interest guided by conscience and a sense of fair play. All the people must be awakened. There must be 190 million individual crustades in this country, acting in concert, to keep the American Way of Life vital.

Business men must light the fire of a passionare belief within all the people—a belief in our way of life that burns brighter than any fanatical faith in the destiny of any other system.

Once the people know the danger, once their enthusiasm for incentive living reaches crusading fervor, they will know how to act. They will see through the will-o'-the-wisp promises of an inexhaustible public purse. They will recognize the fallacy of "something for nothing." Their "horse-sense" will resource it. But to bring all this about, business men must become vocal. Each business must inform its own people. From little companies employing only a few, to big corporations employing many thousands. This program can succeed. The drift toward public dependency can be stopped but business men must be articulate and act decisively.

Mr. Chairman of the Board, Mr. President of Industry, Vice Presidents, Managers, yes—all of us—must get off of our pants and into the plants. when the must meet with the people... talk with the people... work with the people. This isn't something that can be done by writing a check!

Let's accept this call for a Command Performance now! Today!! This very minute!!!



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Your stock will be shipped

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that 'fill the till'

... Order your supply of these famous profit makers now!



### NEW-GARD AUTOMATIC

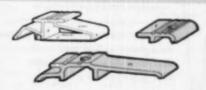
The new, improved Nu-GARD Automatic Door Bottom is the most efficient, most practical door bottom of them all! A simple demonstration makes the safe every time. So show 'em and you'll sell 'em. Homeuwners need them on practically every door in the house both inside or outside.

#### Nu-WAY WEATHER STRIP

The essient strip to sell because it's the essient strip to put on. Any clerk can sell it! Any tustomer can install it. Can be used on most any type window, atoria sash or done. No.
WAY Woother brip is really a fast seller — so keep we'll supplied! Order today.



COLD OUT...



#### Nu ART THRESHOLDS

These attractive thresholds can play a big part in your weatherproofing sales. While Nu-ART 'Thresholds are available in a wide variety of types and sizes, we picture above three popular types. Furnished in either brass or Alacrome, with holes drilled, screws furnished — sach threshold individually wrapped and labeled.





#### DRIP CAPS FOR DOORS AND CASEMENT WINDOWS

These drip caps in both styles illustrated are very effective in keeping rain from dripping or running under doors and wood casemas. windows. Furnished in either bress or aluminum in any lengths desired. You need these practical items to have a really complete weatherprised stock!

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**OLIVER-Cletros Model A** 



OLIVER "60" Industrial



OLIVER "77" Industrial



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#### The OLIVER Corporation

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A Complete Line of Crawler and Industrial Wheel Tractors

## These points sell Armstrong's Temlok Tile

There are good reasons why Armstrong's Temlok Tile is a fast-selling interior finish material. This fiberboard ceiling tile is low in cost—attractive in appearance—light in weight—and quick and economical to install. In addition, it has high thermal insulation value, is a good reflector of light, and helps to absorb sound.

Armstrong's Temlok® Tile is made from loblolly pine wood fibers, cut to controlled lengths by a special process. Pressed into boards onehalf inch thick, these fibers tightly interlace to give Temlok unusual strength and make it easy to handle both in the yard and on the job. Two coats of Warm White paint are applied to the tile surface. The second coat is ironed on for extra smoothness, ease of cleaning, and wearability. The low-density composition of Temlok Tile gives it excellent insulating properties—an important factor when the material is used in attics or in single-story buildings.

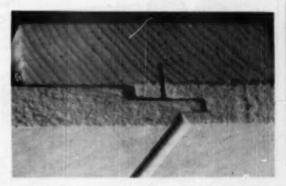
An outstanding feature of Temlok Tile is its unique Lok-Bevel joint. This tongue-and-groove type joint is designed so that tiles can expand or contract without buckling or sagging. It speeds installation and completely hides nail-heads or staples from view.

The market for Temlok Tile is a broad onefor both new construction and remodeling. Commercial interiors—stores, shops, recreation centers,
offices—are all good prospects for Temlok. It's
used extensively, too, in residential attics and
basements, as well as in living rooms and dining
rooms. Get samples and full details about Armstrong's Temlok Tile from your Armstrong wholesaler or write Armstrong
Cork Co., 1602 Ross St., Lancaster, Pa.





Appearance, Tensick Tile has a two-cost ensein paint finish, in Warm White. This smooth, ironed-on finish is attractive and durable—and doesn't require extreme care in handling on the job. It offers good light reflection, without causing glare, and can be repainted with either oil point or cold water paint.



Lok-Bevel joint. This cross-section photograph shows how entra space at either end of the Lok-Bevel joint allows for expansion. This feature of the Lok-Bevel joint assures level surface-alignment of titles and helps to prevent sagging or buckling. Note how staple is hidden from view by the tile at left.



3. Quick, easy installation. Tendok Tile comes in three convenient sines 12" a 12", 16" a 16", and 16" a 92", Tiles are simply natical or stapled along furring strips spaced 12" or 16" on centers over ceiling joint. Lok-Bevel joint provides extrawide nating flarge which speech nating or stapling on the job.



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Your investment in floors of WRIGHT RUBBER TILE will assure you of faster sales at better prices—will put extra profits in your pocket.

You're betting on a sure thing when you install floors of WRIGHT RUBBER TILE in the house you want to sell more quickly, easily and profitably.

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- 5. Leiches for locating every 0" and 45" position - and cross-cut and rip positions.
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tompetitive advantage over other builders. Home buyers know the greater heuting comjort of this new system is more than just another setling phrase. It's an obvious conclusion once you explain how home owners can now enjoy both the advantages of realisme heuting and the recognized comfort of G-E's wern air heating. Smaller ducts and standard fittings account for sizeable installation savings, and you can figure costs more quickly and exactly.

ONLY G. E. OFFERS SUCH AN ENGINEERED AND COORDINATED HEATING SYSTEM

#### You get benefits of 2 types of heat!

The amazing new G-E Air-Wall Register, a product of G-E research and engineering, is generally placed just above the baseboard. It directs air up and out in front of the wall... warming the cold surface so it radiuses heat. You get better forced warm air heat, too. The air pattern cuts down natural cold drafts which normally creep down cold walls.

#### Freedom of furniture placement!

You can sit directly in front of the Air-Wall Register and feel no draft...no uncomfortable hot blasts. In the morning, when the system goes on automatically, you feel no cold air that has settled overnight in the ducts.

#### Balanced heat in all rooms!

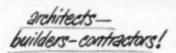
You can accurately adjust heat flow to each room in the home by simple adjustment of the damper on each duct, with minimum disturbance to the "balance" of heat to other rooms.

#### Even floor-to-calling temperatures!

The wall of warmed air diffuses quickly with other air to give even temperatures throughout the room, Warmer floors, too!

#### Quiet!

Small Air-Wall ducts dampen furnace noise more readily than large ducts. Register design also helps to reduce noise.



G-E Air-Wull Heating is engineered for low installation curi; its design is guided by the same famous standards long built into G-E furnaces thermelves. It is easier and less expensive to estimate a job when you plan to use G-E Air-Wall—because of the standard ducts, ethows, and register boses. You may be able to have a great deal on installation costs, too. This system can be installed in houses with or without businesses.

#### Where is GE AMADORALL available

It is available arout now through your local General Electric Heating Distributor. He is listed in your classified telephone directory.

You can put your confidence in-





#### **AUTOMATIC HEATING EQUIPMENT**

For economy, comfort, quality...

use these efficient, low-cost units for forced warm air heat

General Electric GAB-FIRED Weem Air Furnamen. Lome in the companinices, the largest of which takes op little must floor appear line an overage-size refrigerator. Von'll that their clean, guiet operation, their earls head, their high efficiency, their difecting which dust down dust and dist. All unds circuitos and humidity the air. Designed for use with the new 6-6 "Air-Wall" system of hoat





#### for steam or bot water heat, use these famous G-E Boilers

Georal Electric SAS-THES Bellers...burn gat her lints ine-clost comfort. Three to five minutes offer the fishes govenn, steem is in the radialors, or hot water is pouring out lik warmth. Clean, compeled and officient combustion is accomplished through the use of raised part ofmospheric burners. All models approved by American Gos Association. Heavily insulated, with jethel construction of beavy steel.



General Electric Oil.
FIRED Builters ... give quick control, al less tont. These are the tompact, efficient tunnaces upon which General Clectric has built its heeling reputation. The way the oil in burned astions very gailon because (1) the oil in edward with oir into a crothy, bubbly fooms (2) each chapte bubble is then shattered into millions of particles, and (3) those particles burns completely. Five models.



| - |           |
|---|-----------|
| M | tree      |
| M | booklets/ |
| - |           |

| Canacai | Einetein Company, | Automatic | Boating Sic. |
|---------|-------------------|-----------|--------------|
|         | AB-14, Blumbell,  |           |              |
|         |                   |           |              |

\_\_\_\_\_\_

Picose send free information on G-E Air-Wall Heating | Picose used free bookiet on G-E Oil Furnace | G-E Gas Purnace | G-E Oil Boiler | G-E Gas Boiler | Picase used colorful children's bookiet, "The House That The Oil Man Passed By" |

| SARRE | - | 100 | - | - |
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## light and strong



Transm O. I Just are saids and quakes placed in position.

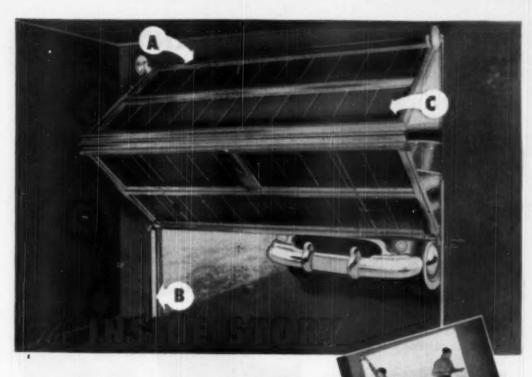
Towns O. T. Jaists and in 2501 Parkway

#### ... conducive to economy

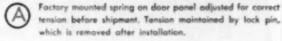
Assure your buildings the
welcome freedom from excessive weight.
Protect them against the aches and pains of undue
physical stresses. Plan with Truscon "O-T" to get Optimum
Trajection—the most efficient carrying ability ever designed into
load-bearing units! • Note the distinctive construction of the Truscon
"O-T" Open Truss Steel Joist. Features: Great rigidity through integral
welding of wide tee-shaped top and bottom chords and a strong, round
continuous web member. High fire resistance. Simple to install, being
completely shop fabricated and reaching the job ready for placing.
Each joist is "place-marked", greatly simplifying and speeding construction. Write for illustrated literature giving complete details.

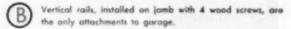


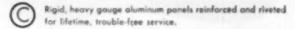
PRES Book on Irruscan Stud Windows, Write for it. The Truscan Steat Company Manufacturum or Complete Line of Bagidantial Studio Hong Windows . Basidantial Commants . Security and Bassenest Windows . Sreams and Storm Sook. Mariel Lath Products . Industrial Studi Doors . . Coal Chote Doors TRUSCON STEEL COMPANY
Splendars of Reside Sine Corporation
YOUNGSTOWN 1. OHIO



## is as Simple as ABC







FEATHER TOUCH OPERATION

FIRE RESISTANT

SIMPLE CONSTRUCTION

**B 18-GAUGE ACOMINUM** 

SIMPLE INSTALLATION

SINGLE CARTON PAGNAGE



L. S. TAYLOR MANUFACTURING CO.

Door being mounted in roll bearings to complete installation.

L. S. TAYLOR MANUFACTURING CO.

| 849 Marietto Stri<br>Atlanta, Georgia |                |              |
|---------------------------------------|----------------|--------------|
| Gentlemen                             |                |              |
| Please sand fo                        | di Information | and prices t |
|                                       |                |              |
| NAME                                  |                |              |
| NAME<br>ADDRESS                       |                |              |
|                                       |                |              |

# BUILD 5 TIMES AS MANY HOMES IN '50!

Pall ECONOMY

with

Sec for yourself why successful builders everywhere will build the P&H way in 1950! Here are two actual P&H Homes that were quick to build, quick to sell — highly profitable to the builders, a joy to the owners. They're attractive, full-size homes — with all the salesappeal of well-built, conventional homes.

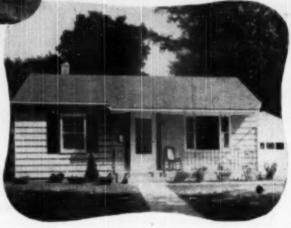
Here's why so many builders look forward to bigger profits in '50... with P&H Economy Homes:

THE TIME ELEMENT . . . P&H Economy Homes save months on the job . . . simplify your problems of erection, financing and selling.

THE COST FACTOR . . . you get the most accurate cost control the building industry has ever known!

THE PROFIT OPPORTUNITY... you can meet the price demands of the market and still realize a reasonable profit — a profit you earn on a larger number of units. For a profitable building year in 1950, get in south with us immediately.

see our exhibit at The Home Builders Exposition in Chicago, February 19-23 Booth 89.



#### LOOK AT THESE PROFIT FEATURES

- Full size 24 ft, wide x 32 ft.
   long
- Large living ream—11"7"x17"4"
- · Joint-fran, crack-proof walls
- Chaice of two or three bodrooms
- Flush doors throughout
- Built with or without basemen
- Choice of heating equipment
- Highly rated for F.H.A. financing

P&H

HOMES

301 Spring Street Part Washington, Wis.

HARNISCHFEGER

#### BENNETT "DEEP-SEAT" ASH DUMP

100 % Heavier for Permanent, trouble-free service -9 x 4½ inches.
Cat. No. C-205.



#### CAST-IRON CLEANOUT DOOR

Air-tight closure...convenient hinge-type door. Crimped masonry wires. Sizes 8x8, 12x8 inches. Cat. No. C-213.



#### BENNETT GRATES & LOG DOGS



Cat. No. A-501 Heavy Dury, Extra Deep, Removable Enda, Ash dumping trap. For Coal



Sturdy Cool or Wood Bashes



Wested Grate. Use with or without andicuse. Good outdoor freplace grate.



Log Dogs for Heavy Logs. Protect valuable endirons. Ideal for camp or outdoor freeplace.

#### THE BENNETT FIREPLACE



# THE BENNETT LINE OF SALES PROVEN FIREPLACE SUPPLIES

The Bennett Fireplace line is complete — and profitable. And Bennett dealers enjoy a steady demand, thanks to our continuous national advertising. It pays to feature Bennett.

#### SIMPLIFIED and STANDARDIZED

This simplified Bennett fireplace is sized for standard brick, with no cutting or fitting. It lets you offer every customer "The Perfect Fireplace." Quicker and easier to build—it's priced within the reach of all. It's a big-volume, high-margin unit—a real profit-builder for you. Count on this Bennett—the recirculating unit with med sales appeal.



## BENNETT Expanslip

A Better Damper at Low Cost. Steep 60° Front slope gives sure draft. Structural Steel with sturdy slip-joint climinates damage in shipping, handling and in use. With unconditionally guaranteed steel valve. Cat. No. C-101.



#### BENNETT CAST-IRON DAMPER

A quality damper at competitive prices. Superior casting facilities in our own foundry enable us to produce this steep stope 50° Damper, with interchangeable Rotary or Ratchet Control feature. With guaranteed steel valve (No. C-105) or cast iron valve (No. C-104).



## fleescreen

The only Nationally Advertised curtain acreen. Every fireplace owner is a prospect for Flesscreen. Its own best salesman, a display on your floor will increase your volume on this quality product. This year, the Flesscreen line includes a perfectly balanced line of Fireplace Accessories, 100.

Write now to 250 Market St. for Catalog and Full Information on the COMPLETE POST-WAR BENNETT LINE

#### Here's how Kimsul\* advertising

# helps you sell better homes!

Ads like this - month after month in Berrer Homes & Gardens and American Home magazines, plus Small Homes Guide, will tell the exciting story of new Reflective KIMSUL to 6,000,000 prospective buyers this year!

This advertising is pitched to help you sell houses. It's aimed to create a greater-than-ever demand for KIMSUL-so that you can benefit by making it an important selling feature of every house you build.

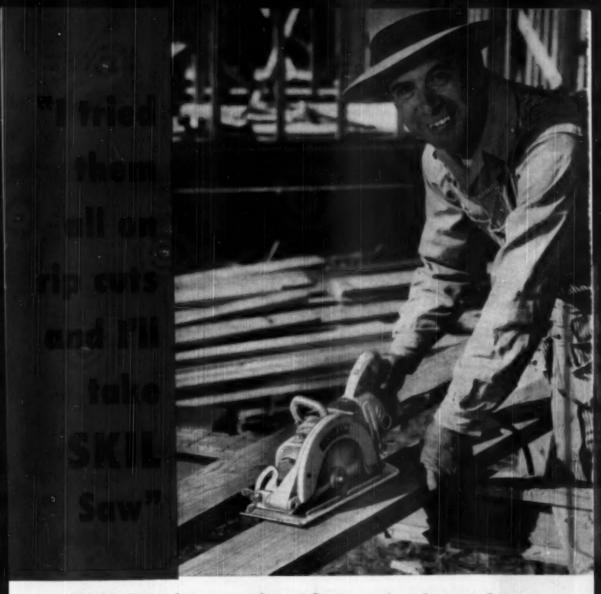
Each advertisement tells about the aluminum foil vaporseal cover, the double barrier against heat loss, the way KIMSUL helps keep humidity at the comfort level. It tells about fuel savings up to 44%, summer heat reduction, resistance to fire, insects and mold. It tells convincingly of the value of good insulationand shows why new Reflective KIMSUL is now America's finest, most complete insulation.

Once you've seen this new KIMSUL, you'll agree-it can be a mighty important selling feature of the homes you build. Especially with 6,000,000 prospective buyers knowing about it-by name!

For further information about new Reflective KIMSUL Insulation, contact nearest KIMSUL dealer, or see literature in Sweet's Architectural and Builder Catalogs, or write directly to Kimberly-Clark.







#### "SKIL Saw keeps going where going is toughest"

It takes a good, tough saw to stand the gaff on rip-sawing. That's one reason carpenters everywhere prefer hi-torque, powerful SKIL Saws. SKIL Saws keep going where others bind and stall. SKIL Saws withstand the roughest use because of extra strong gears. SKIL Saws stay out of the shop, stay on the job.

Try SKIL Saw yourself. See how it speeds all kinds of sawing. Feel how perfect balance OVII

and scientifically placed handles for both hands make

it easier to handle. Try SKIL Saws today. Ask your SKIL Tools Distributor for a demonstration.

SKILTOOIS

Factory Branches in Principal Cities In Conado: SKR.TOOLS, LTD., 66 Partiend St., Tonseto, Ont.

SKIL Took are made only by SKILSAW, INC. 5033 Biston Ave. Chicago 30, IE.

## American-Standard plumbing fixtures worth of homes

releity 5194 LIBERTY BUILDING COMPANY "The use of American-Standard Plumbing Fixtures and Fittings is 315 WEST MINTER STREET LOS ANGELES 15. CALIFORNIA a source of constant pride to this company and has always received the highest praise from prospective Bovestor 3, 1969 buyers and actual purchasers of MARRIE OF THE EXPLICATE THE PRINCIPLE Liberty Homes. It has been our endeavor throughout our building career to use the best materials pos-American Substance & Standard Sentiary Corp. sible, and for that reason we feel It is not entrope pleasure to write to you and addise you of the famoushin remotion we have received from the tode of your planting Platters and Fittings in our subdivisions. F. D. box 1226 Pittemorph 30: Fermaricanta that we can find no better plumb-Dr ling we constructed life typics from the first sense for fittings in our mobilities one.

Dr ling we constructed life deplet deallings and of two and three benderon boson, all typics of the line in the first sense of th ing fixtures and fittings than those manufactured by your company." To lyin on started developing on area booms on "dischester Square", comprising ever \$00 per lyin on started developing on area booms on "dischester Square", these some end, on sale mentions, our first such sensation of 119 depicts conclude. These some seals in sale sections, our first such sensation and in set every Square colds on sale in set \$1.000,000,000, \$00 per level \$1.000, \$1.000 Since they make of Literic Boson have continued at a rapid parts. Thring 1969 we had already soid 13; units, amounting to over \$6,000,000,000. The use of American-Grandord Picebing Fixtures and Fittings is a exercis of constant. Prime to take company and has alongs received the bighest primes from protective but-are and extra perchanger of Library towns. It has been not understood use the second of the constant of the const The regentation of our bosse has given regidly, and we feet that in a substantial second property arguments to this growth and to the registration we have gained. So are extremely proved of our exemplation with your organization unrespirate use of pour opsignment and materials and it is our sincere desire that this association will contained theregized the pears. Course Din Sol



use American Standard Meating Equipment and Plumbing fixtures, are finding this a strong selling post to strong in their are advertising. It tells the public that only the best products were used preates confidence in the

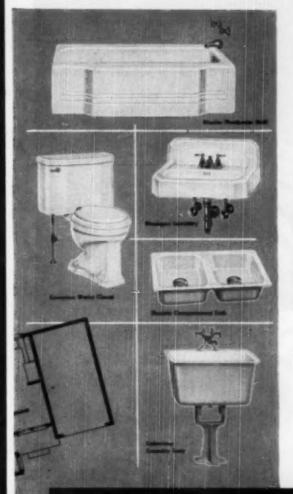


NORTH PERSON

for every job you build, there's American Standard Heating Equipment to seit. Builers, Warm Air Furnaces,

for homes of all sizes. for bosses of all science, for coal (hand fired or stoker), oid, or gas. Plus Radiators, Convectors, Busebusers' Radia ant Panels, (HI Burners, Domentic Water Heaters, and

# help sell more than \$9,685,000.00 for Los Angeles builder!



in 1947, the Liberty Building Company constructed 107 duplex dwellings and 95 two and three bedroom homes....

In 1948, started 800 dwellings project. Sold first unit of 119 duplex dwellings in one weekend. Two months later sold second unit of 105 dwellings in a single day . . .

In 1949, sales continued rapidly. Had already sold 735 units by December.

. . . and all these homes had American-Standard Flumbing Fixtures and Fittings!



BUILDERS everywhere, like the Liberty Building Company of Los Angeles, have found that American-Standard products help sell the houses they build. No heating equipment and plumbing fixtures are better known... none better made. Their outstanding quality, backed by strong, consistent advertising, has created wide public acceptance. It will pey you to take advantage of it!

When you install American-Standard products in the houses you build or remodel, you create satisfied customers. And whatever the type of installation . . . whatever the size of the budget . . . you will find

what you need in the American-Standard line. Ask your Heating and Plumbing Contractor for details. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

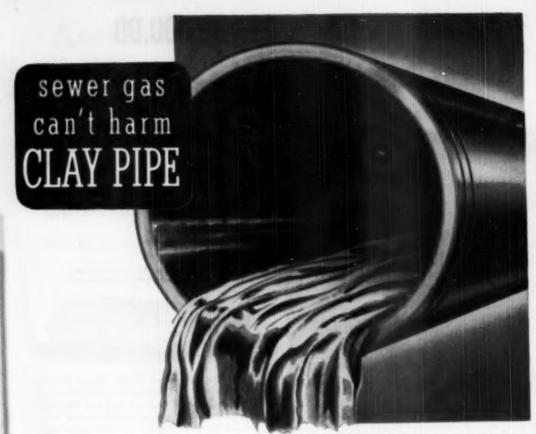


MARK OF MERIT

American-Standard

First in heating . . . first in plumbing

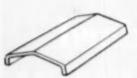
Serving, home and industry



The upper invert of Vitrified Clay Pipe is safe from the destructive, corroding acid fumes that rise from sewage. It protects your reputation by lasting forever, because it's chemically inset—top and bottom, inside and outside, through and through. Clay Pipe is safe from fumes and acids alike—and it's economical, too. Fast installation time helps salvage profits of every job. Use the pipe that passes inspections easily. A complete assertment of Vitrified Clay Fittings let you "call the turn". Be sure with Clay—the only pipe that never wears out.

#### NATIONAL CLAY PIPE MANUFACTURERS, INC.

705 Ninch and Hill Bidg., Los Angeles 15, Calif. 1105 Houstogene Sank Bidg., Columbus 15, O. 100 N. Labelle Sc., Res. 2100, Chicago 2, Di. 206 Connelly Bidg., Atlanta 5, Ga.



WALL COPING



FLUE LINER



CHIMNEY TOPS



6-094-04

# ways to CUT CONSTRUCTION COSTS!

B&D "Quick-Saws", Hammers, give you MORE OUTPUT...

Per MAN Black & Decker Quick-Sawn give you perfect balance, closs-coupled design, reduced weight and length, comfortable "suw grip" switch handle, complete safety. H&D ELECTRIC HARMERS are hard-litting and amazingly husky, yet compact and light in weight. Result: your men can handle either tool more easily, with less frigger; turn out more work avery day.

Per HOUR Black & Decker QUICK-SAWS, powered by heavy-duty B&D-built universal motors specially built for tough sawing operations, are ten times faster than hand sawing. Black & Decker Electric Hammens deliver thousands of sharp, positive hammer blows per minute to make light work of many tough construction jobs.

Per TOOL These B&D Tools are built to lost, give you extra years of heavy-duty service? Both tools are fully protected against dust and over-beating; have powerful motors, extratough gears, busky housings, all the extra strength and stamina built into every Black & Decker Tool?

WBITI TODAY for free, detailed catolog, See your nearby 86.0 Distributor for full details on Sers, Hommon, Brills, Impact Wirecoins and many other time-saving, code-cutting construction tools! The Block & Docker Mig. Co., 666 Pennsylvania Aro., Tawson 4, Md.

CEADING DISTRIBUTORS DEVERYWHERE SELL

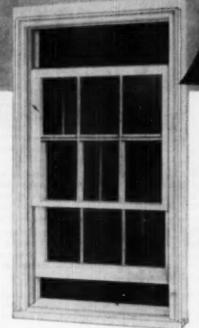
PORTABLE ELECTRIC TOOLS

"Brade Mark Sup. C. S. Pat. Cit.

BLACK & DECKIR RESCRICHAMMERS drive a wick
variety of tools to drill or
channel in brick, chan, concretis, thip, chan and scale midel; gouge, thays
and make timbers; resum and coak; tomp and
vibrate concrete forms; scult concrete surfaces to
remove form marks. Compicially self-casteined.
Universal moders operate from any standard 110
or 220 valt power line or portable generatur.
Four models raded by drilling aspacity in concrete
for %", %", "1%", 2".

BLACK & SOCKER ELECTRIC QUICK-SAWS rip. croscoré, decle, angle groove-in-in-word, mende, stone, compositions. Ovichly adjusted for angle or depth of cut. Easy to though blacks and class. Universal socious apecale on an stensional III or 220 vali premer line or particle generation. Three models for catting to depths of 2%, 2%, 3%, 34%.

## Not Just One But Two Leaders



UNIT WOOD WINDOWS

Superior" is equipped with an exclusively patented "jamb-liner" that serves a dual purpose. It functions as a snug weatherstrip in reducing air-infiltration and also provides free, easy, smooth sliding sash.

Interchangeable Storm Sash and Screen can be ordered as standard equipment.

"Superior" is sturdy, durable and extra heavy (1\%" thick jambs and 134" thick sill) to give greater satisfactory service.

"Superior" is constructed of thoroughly kiln-dried Ponderosa Pine and is toxic treated in accordance with NWMA standards.

Superior" is one type of frame for all standard building construction-brick veneered, solid masonry and frame walls.

"Superior" is made in modular sizes. Widths: 1'-4" to 3'-8"; Heights: 2'-6" to 6'-6". Yes, it's complete to the Nth degree . . . Superior in every detail and a window worthy of the name "Superior"!



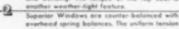




\*Bilt-Wall Storm Sush and Screen Unit aptional equipment,



The Wind Break everlaps the header, thus forming a weather-tight soal between frame and building. The tongue of the top seek is another weather light feature. Superior Windows are counter-balanced with

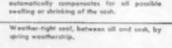


of these balances eliminates chattering where either sash is operated. Such can be installed at removed easily and

quickly without leasening or removing any weatherstrip.

All wood ports, thoroughly biln dried and chemically treated.

Superior (cushion-type) noilless weatherstrip wtomatically compe nsates for all possible swelling or shrinking of the souls.





AROUND Swaling or shrink-ing will not offect smooth, near sliding.





CARR, ADAMS & COLLIER CO.

Dubuque, lowe

## in the BILT-WELL LINE

And what Louders' Separter Wand Windows, the most advanced double-long window on the market. And...No-Style Wood Cablest Units, the most flexible cubinet unit over offered Doubles and Builders!







DOVETAR JOINTS -- Brown fronts are dove tailed art sides. Brown bottom, but and sides are langued and source to the property of the property to the property t



DUSTPROOF—The drawers and down unerlap their systemings and make the interior of the submers dustproof.



STRONG CORN(R) — Tungue and proove construction give extra rigidity, plus is sealed juill' against version and dust follows:



SMOOTH STYLING—In perfact harmony with maders styling of ranges and refrig grature. Easy to diese.





Nu-Style Cabinets are used in kitchens, bedrooms, bathrooms, play rooms, offices, industrial shops and stores.

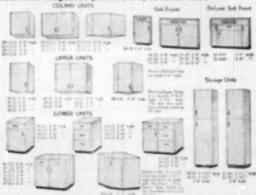
Nu-Style Cabinets offer unlimited sales possibilities in both new building and remodeling fields.

Nu-Style Cabinets are in big demand because they are flexible—they can be scribed and . . . they can be enameled any color or finished natural.

Nu-Style Cabinets have many features of utility, convenience and economy that appeals to every homemaker. Leading Dealers are doing a profitable business from a relatively small stock of K.D. carton packed units.

Nu-Style Cabinets are ideal as a warehouse item because they are small, compact (K.D.) carton packages that are easy to handle and stack. Leading Dealers are making big profits from a small stock.

Boautifully illustrated literature, plus advertisements appearing in American Builder, Practical Builder, Architectural Forum, Better Hames & Gardens and American Home magazines pove the way to easier sales.



The Bill-Ball Line: Superior Unit Wood Windows - Palerter & Interior Duors - Extranço & Shotters - Clos-ito Case-seces - Care-der Barage Dears - Becoment Unit Windows - Louvers & Balle Sech - Brechfort Nachs - Combination

Bases - Services & Sterm Sech - Career (Chine) Cabinets - Still-der Cabinets - Ironing Sound Cabinets

Montals & Talaphana Cabinets - Multiple-Une & Lines Cabinets - Stair Parts.

Distributed by leading wandwork jobbers



### Ten Years Ago ...

in August, 1939, this emprove test paving was laid in Becaud Avenue North, Minnespelis. The budly scaled section of roadway in the background was made with regular portland coment. The foreground section, told of the same time, was made with Atlan Duraphatir—the first commercial use of the air-entral

the first commercial use of the air-entraining pertland comment originated and developed by Universal Atlas.

Both sections, subjected to the severity of ton Minnsopolis winters and to heavy applications of de-leing salts, are shown just as they appeared in July, 1949—convincing proof of the characteristic darability of Duraphastic concrete, of its high resistance to freezing-the wing weather and the scaling action of de-leing salts. Longitudinal structural crack shows a some reveiling. Note perfect transverse joint.

## Today.

Added Durability and Improved Appearance in structural concrete made with DURAPLASTIC\*

From initial paving installations... to the first structural job... to beautiful, modern structural achievements like the one shown here, architects, engineers and contractors have come to rely more and more on the extra durability and improved appearance of concrete made with Atlas Duraplastic air-entraining portland cement.

In Duraplastic's rapid ten-year growth, its advantages have been applied to all types of mass and structural concrete—for foundations, walls, columns, and floors. It's ideal for slip-form, gunite, stucco and similar uses.

With Duraplastic, less mixing water is needed for a given alump. The resulting mix is more plastic, more workable, more uniform and cohesive. It's easy to place and finish. Water-gain and segregation are reduced. Surface appearance is improved and has higher resistance to the effects of weather-exposure.

For structural concrete needs of today and tomorrow, Duraplastic offers better concrete at no extru cost. It provides the precise amount of air-entraining agent interground with the cement for satisfactory field performance. It complies with ASTM and Federal Specifications, sells at the same price as regular cement and calls for no unusual changes in procedure.

OFFICES: Albany, Birminghom, Boslen, Chicaga, Duyton, Konsus City, Minnospolie, New York, Philadelphia, Pittsburgh, St. Louis, Woca.

Sand for new free booklet, "A Decade of Duraplantic Air-Entraining Cement," Write to Universal Atlas Cement Company, (United States States Corporation Subsidiary), Chrysler Bldg., New York 17, New York.

\*\*\* Duraphasis" is the registered trude mark of the nie-entraining portland coment manufactured by Universal Atlas Coment Company.

AR-D-51

## ATLAS DURAPLASTIC

MAKES BETTER CONCRETE AT NO EXTRA COST



"THE THEATRE GUILD ON THE AIR" - Sponsored by U. S. Steel Subsidiaries - Sunday Evenings - NBC Network

Cont



176 families live in this modern boosing development in Queens, N. Y. The entire promot is beasted by a B. & G. Bydre-Fin bystem supplied by system believe in eight builder research

# FOR BAG Hydro-Flo HEATING

It is not just happenstance that the popularity of B & G Hydro-Flo Heating grows steadily, year after year. You find this forced hat water system in buildings of every size and character, simply because it offers completely outstanding advantages.

B & G Hydro-Fiv Heating is amazingly economical in operation—delivers years of trouble-free service—and provides the kind of comfort obtainable only with controlled radiant beat. And B & G Hydro-Fiv Heating is competitive in price with heating systems worthy of the name?

The close temperature regulation possible with forced bot water means that fuel is never wasted in supplying unnecessary heat. Indoor temperature is maintained by accurate controls at the comfort level, regardless of how sharply the weather changes.

Whether radiators, convectors, baseboards or radiant panels are used, B & G Hydro-Flo Heating sets the pace for efficiency, low maintenance and comfort.



This soulest retidence comes the compact of controlled radiant warmth from a B & G Wodro-Flo Sentem.



The waits required for B & G Hadro-Pia Meeting are few and simple. They can be applied to any but waiter beating builty, whether vis. you or subset ford.

Best for any kind



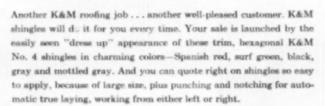
\* Reg. U. S. P. J. DE.

- SUBJECT: K&M"Century"Asbestos-Cement Shingles
- ▶ OBJECT: Attractive, durable, economical roofs



KAM No. 4 Sporish Rad Roofing Shingles, applied by Pyronid Roofing Co., ore a highlight of the Cherryherst section in Houston, Texas.

Building Owner Brady M. Steele writes, "It became necessary to re-roof the building housing the Cherryhurst Pharmacy and other establishments." He adds, "I was so impressed with the qualities of the 'Century' No. 4 Red Asbestos-Cement Shingles that I contracted with the Pyramid Roofing Company to put this material on the roof. Now that the job is completed I am more than pleased with the results. The entire building is enhanced by the roof."



You are able to assure customers about resistance to weather, rot, rust, fire and upkeep—knowing that K&M "Century" Shingles will make good for you. That's why they make for good business. See your K&M Dealer for full details, or write us direct.



Mr. Brudy M. Steele



Original manufacturers of Ashestos-Cement Shingles in this country

### KEASBEY & MATTISON

COMPANY . AMBLER . PENNSYLVANIA

Universal Select-a Range

UNIVERSA!
introduces
the revolutionary now

FOR RESIDENTIAL APARTMENT AND INSTITUTIONAL INSTALLATION

Select-a-Range

and presents a
striking new conception
in kitchen planning
flexibility

Engel Berry Wille



UNIVERSAL

Fresh in conception . . imaginative in design . . . revolutionary in application flexibility . . . powerful in consumer appeal !

It's the dramatic new Universal electric Select-a-Range, the first really significant advance in range design in over a quarter of a century!

Now for the first time, you can design kitchens with a flexibility and freedom never before possible. Now, you can match cooking facilities exactly and realistically to the specific requirements of each residential unit. And you can do it practically and economically without custom-built equipment...and with matchless efficiency!

Yes, all this is readily achieved with the new Universal Selecta-Range. Based on modular design, it is truly functional, completely flexible in adaptation and extremely simple to install. But best of all, it frees the designer from the rigid dimensions and the limited planning imposed by the conventional "package" range.

The Select-a-Range is and ther great advance in the 108 year history of Landers, Frary & Clark, leader in the electric range industry. Pioneers in the electric appliance field, Universal holds many basic patents in range design and has contributed many outstanding improvements to better, faster, easier electric cooking which today are the stangard of the industry. It is this experience and this leadership that are responsible for the development of the revolutionary Select-a-Range... as well as a whole new approach to kitchen planning and cooking convenience.

and here it is!

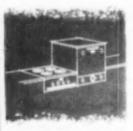
## presenting

#### the dramatic new UNIVERSAL

Now you can design your range as you like it!



typical right-hand oven orrangement. Surface unit and even are facated at "Convenience Level" height for easy cooking. Six storage drawers for large utensil capacity.



Economy arrangement. Minimum equipment provides complete cooking facilities in a compact space at law sost for opertments and small homes. May be economically aspended at any time



COMPLETE OVEN - with one piece perceloin enamel lined interior, Thermastat Control and Pro-Hant Push Sutton, Automatic Timer and Minute Minder are standard equipment but can be alimi nated if desired.



STORAGE DRAWER - extra heavy gauge steel, high-baked enamel inside and out, bross runners.

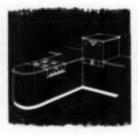
More than 25 different arrangements can be created from these three basic modular units. Each unit is complete in itself so that it can be installed separately . . . recessed in stock cabinets or custom millwork. Or these units can be fitted together . . . with a right-hand oven, left-hand oven, double ovens . . . all at the "Convenience-Level" height to eliminate back-breaking stooping and bending.

PLATFORM SURFACE UNIT - with four hostheating "Monatube" Thrift Units, Seven Heat Contral Switches. Platform backsplasher and platform light are uptional

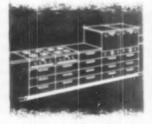




two-Oven arrangement. One of many arrangements for large homes, estates, forms. Ovens may be right-hand, lefthand or separated at any height desired.



Separated arrangements. Plat form surface unit is recessed in penin solar sounter to serve either side Oven can be placed an counter or fitted into wall. Oven venting fitted to over door. fatra units can be added any time



Big capacity arrangement. You surface units and two avens, large work and therage areas, big capacity make this arrangement ideal for institutional use.



Loft-hand oven arrangement. Oven is located at extra high "Convenience Level" for taller people to eliminate stroping. Provides greater confort and convenience.

# Select-a-Range



FOR RESIDENTIAL.
APARTMENT AND
INSTITUTIONAL
INSTALLATION



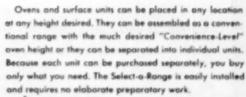
to give you complete electric range flexibility in kitchen planning!



to give you over 25 range variations and freedom to design kitchens as you want them!



to give you something new...something different in kitchen design to help you sell your house!



For added sales appeal in every kitchen, here's something new for you...something different...something to help self the house! It can be financed on the mortgage at law cast.

Now you can create and specify exactly the range design in your kitchen planning. Gone are the restrictions of conventional range inflexibility. Here's a great new appartunity to project refreshing new ideas into kitchen design with the revolutionary Universal Select-a-Range.

The Select-a-Range is based on modular design. It is made up of three basic interchangeable, independent, self-contained units . . . an oven, a surface cooking unit and a roomy storage drawer. These units can be fitted together exactly in more than 25 different arrangements.

UNIVERSAL

for greater freedom and flexibility in kitchen planning...



interprets Select-a-Range flexibility

From the board of Royal Barry Wills come these six sparkling, modern kitchen designs. . Illustrating how the flexibility of the Universal electric Select-a-Ronge adds exciting freshness and sales appeal to kitchen planning.

It is this flexibility that gives the designer greater scope to make the whale kitchen contribute more fully to better living. It is this flexibility that provides full cooking facilities in the most compact kitchen where even the smallest apartment range will not fit. This flexibility gives you no-stoop ovens at the "Convenience-Level"... larger work areas... more storage capacity... greater beauty... fuller utilization of space.

All this adds up to more sales power for you. Now homeowners conselect the cooking capacity they want . . . from a minimum range that can be expanded later all the way up to maximum capacity. Yes, here's semething new... something different to increase the desirability of the kitchen. And here is sales appeal at low cost because the Selecta-Range is priced to meet the demands of today's building market. The price of a Select-a-Range of any design can be included in the original mortgage or in a modernization financing plan.

Whether in new construction or modernization, the Select-a-Range is equally at home in Traditional, Modern or Ranch House architecture. Its flexibility is unmatched for apartments, hospitals, small institutions . . . in fact, wherever modern cooking facilities are needed.

### National Advertising and Promotion

These six Royal Barry Wills kitchen designs will be offered in four-color full-page and two-page introductory advertisements in leading national magazines such as Better Homes & Gardens, Saturday Evening Post, House Beautiful, House & Garden, etc., announcing the Select-a-Range to the public. These advertisements will appear in the Spring and will be supported by a national promotion and publicity program to consumers, builders, material dealers and appliance retailers.

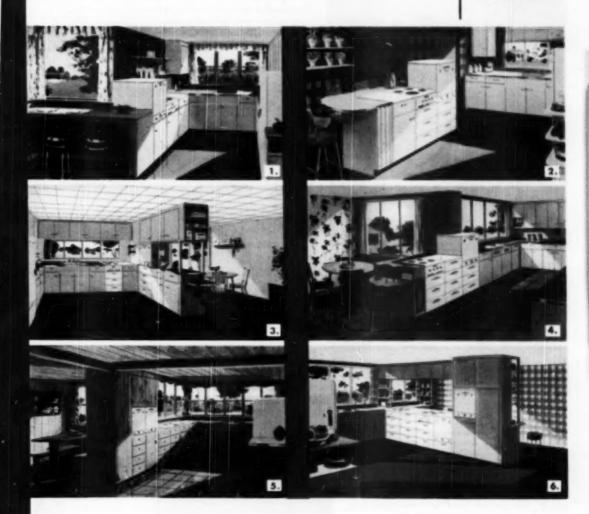
- Oven and plotform surface unit are recessed in an inexpensive wood cobinet. This minimum equipment "economy" arrangement provides a full.
   dinch range in a compact space with ample counter working space.
- A fully equipped range with a right hand "Convenience-Level" oven, large storage capacity and adequate counter space for the average as a family. An ideal design for modernitation.
- For easier working convenience, the oven and plotform surface unit are separated and installed at right angles. The oven is at the most convenient level with large storage and counter space at either side.
- 4. Oven and plotform surface unit are extended with extra capacity storage and counter space between. Surface cooking unit is integrated with serving area in a peninsular arrangement for added convenience.
- Double haking and brailing capacity is provided by two avens mounted side by side in a well at "Convenience Level" height. Here is extrame flexibility not possible with a conventional range.
- 6. Big capacity arrangement with two evens and two platform surface units. Low-level oven provides counter-height work surface with second oven at "Convenience-Level" height adjacent to extra large counter space.

A SPECIAL PORTFOLIO of these Royal Barry Wills docigns in full color has been prepared for the building profession. For your complimentary capy, write to bonders, Frury & Clark, Dupt. AB, New Britoin, Comm.



## in these smart new kitchen designs

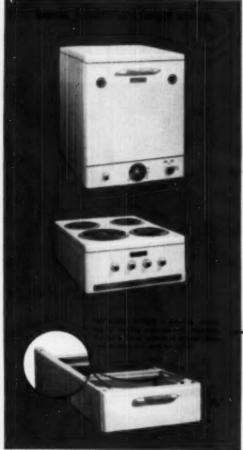
FOR RESIDENTIAL APARTMENT AND INSTITUTIONAL INSTALLATION



## UNIVERSAL

for greater freedom in your kitchen planning...

## Match the Select-a-Range exactly to your



OVEN—RA9401—Outside dimensions: 20" wide x 25" ditep x 24"4" high. Baking unit 2300 watts; brailing unit 2500 watts. Maximum connected load 4800 watts. One-piece, porcelain enameled interior 16" x 16" x 19" with rounded corners. Built-in rack guides assure level alignment of racks. Counterbalanced door with dual-hinge spring lock. Two oven vents at top of door. White porcelain enamel outside finish. Wired at the rear through a built-in compartment, permits oven to be backed flush against finished wall or cabinet. U.L., installation rating form O. Mounting holes in base to fasten oven to counter or storage drawers.

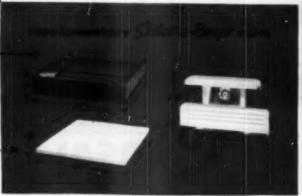
PLATFORM SURFACE UNIT—RA9402 — Outside dimensions: 20" wide x 25" deep x 9" high. Four fast-heating "Monotube" units: three, 6%" 1100 watts; one, 8%" 1900 watts. Maximum connected load 5200 watts. Seven-heat control switches for each unit. White porcelain enamel outside finish with acid-resisting platform top. Wired at the crar through a built-in compartment, permits unit to be flush mounted within outside dimensions. Mounting holes in the base to fasten unit to counter, storage drawers or framing.

STORAGE DRAWER—RA9403 — Outside dimensions: 20" wide x 25" deep x 7%" high. White baked enamel exterior finish. Drawers are suspended on brass runners for quiet operation. Extra-heavy gauge steel, one-piece body. Mounting holes in top and bottom for assembly to other drawers, oven or surface unit.

TOE BASE -- BA9404 -- Outside dimensions: 20" wide x 21" deep; x 4" high. Servers on bose on which storage drawers and even or surface unit can be mounted to one integral place. Side fastening permits two or more bases to be locked side by side for multiple "stocking" of units. Baked block normal on houry gauge steel.

SPLASH BACK & LIGHT-11-9402-075 & -700--Outside dimenslone: 20" wide x 11%" high to top of light. Foreign to back of the surface unit with chromium trim concealing the joint.

COUNTE TOP-11-9403-050 - Outside dimensions: 20" wide x 25" deep x 11u" high. Neary steel with acid-resisting parcelain angmel fisich. Serves as top cover for storage drower unit.



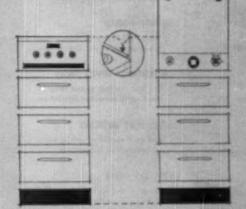
### specific design requirements



HE DESIGN of the Select-e-Range provides for the building up of required cooking facilities from basic medular units. These units can be quickly assembled into one or more integrated groups as desired.

The drawings on this page illustrate how the madular design of the over, surface unit and storage drowers permit grouping in almost unlimited variation. Complete specifications, dimonoions and construction detail are shown on the appeals page.

Datell drawing showing chromium illiet see cooling joint between the even and surface cooking only when those two units adjain. This fillet makes the surface every to close and allies loutes dirt cotching crevesses.



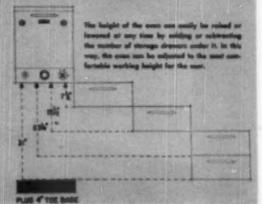
Surface reaking unit can be brought up to counter height with three storage drawers mounted on a les bess.

Convenient working height the two or more storage decreas and

When two "stocks" are designed as one integral unit, the "stocks" are feetened together providing a secure foundation.



rs plus one counter top; or two derage dro is one surface cooking unit expects the height of the over.

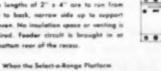


### Installation is simple and low cost

When the Select-a-Range is assembled as an integral unit with oven, surface unit and drawers in one assembly, installation is the same as with a conventional range. One 3-wire, 120/240 valt feeder circuit is brought up to the terminals in the back of the oven or surface unit and interconnection made between the two.



When the Select-o-Range Oven is to be instelled in a wall or in cobinet work, the recess must be 20%" wide x 23%" deep x 25%" high. At the bottom of the recent, three lengths of 2" x 4" are to run from front to back, narrow side up to support the over. No insulation space or venting is required. Feeder circuit is brought in at the bottom roor of the recess.



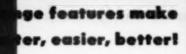
Surface Unit is to bu installed flush in a counter, the recess should be 20%" wide x 25" deep a 9" high. Feeder circuit should he brought into the recess at the Buffuer reer.



When two Select a Range Overs are to be installed one on top of the other in a well or cobinet, the recess must be 20%" wide a 23%" does a 50% high. He additional bracing needed for the second even.



When two Select-o-Ronge Ovens are to be installed side by side in a wall or cobinet, the recess must be 40%" wide x 25%" deep x 2515" high Separate bracing is required at the betton of each aven.



### EXTRA LARGE OVEN INTERIOR

-16" x 16" x 19" with Balanced Heat and 40% faster preheating with automatic cut-off.

### AUTOMATIC TIMER

starts and stops oven as desired with simple, foolproof precision.

### COUNTER-BALANCED OVEN DOOR

has automatic broiling stop.

### MINUTE MINDER

keeps track of time for any cooking operation from one to sixty minutes.

### "MONOTUBE" THRIFT UNITS

are fast heating, cannot warp or bend, concentrate heat distribution.

### SEVEN-MEAT SWITCHES

give exact control of heat for every desired cooking requirement.

### SWIVELED UNITS

swing up and out for easy cleaning. Chromium flanges keep hat utensils away from parcelain top.

## UNIVERSAL

LANDERS, FRARY & CLARK, NEW BRITAIN, CONN.

For further information about the new Select-a-Range and the name of your nearest distributor, write to Dept. B-D, Landers, Frary & Clark, New Britain, Conn.



## HOW'S YOUR LANGUAGE IN FRONT OF Ladies?

We don't have to tell you that a house with a kitchen and bathroom that pleases Mrs. Homemaker is a house half sold.

Colorful durable Formica surfaces in these two all important rooms speak a language of their own—lady talk that sells fast and sure.

The Formica Vanitory, combination lavatory and dressing table, is fast climbing to the top of home buyers "must have" list. National advertising has them looking for the famous Formica Label.

Formica is ideal for bathrooms, not alone for its beauty, but for its resistance to alcohol, boiling water, non-bleaching cosmetics, and ordinary mild acids and cleaning alkalies.

You owe it to yourself to send for Formica's full color idea folder "What's New in the Bathroom".

A free copy is yours for the asking. Write Formica, 4514 Spring Grove Ave., Cincinnati 32, O.



"Just as good" is a fable. Look for the label.
Insist on genuine Beauty Bonded Formico.

### 4-STAR FEATURE

National Lock's new no. 1

ask your jobber

DISPLAY BOARD AND ASSORTMENT

- · One Complete Deluxe Board to Replace Several of Your Other Boards
- · Reduces Inventory While Providing All **Major Cabinet** Hardware Items
- . Only 21" Wide, It Saves Counter Space . . . Makes Space More Profitable
- · Appeals to Those Who Want the Finest . . . Increases Per Unit Profit



Superlative Quality ...

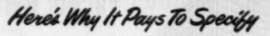
have been carefully selected as the ultimate in National Lock quality. included are only the very finest . . . the best hardware available anywhere. Open stock jobber for details.

& Forged Brass Hardware New Type Concealed Hinge Beautiful Concave Knobs & Smart Die-Cast Handle Other Fast-Selling Items

NATIONAL LOCK COMPANY



DISTINCTIVE HARDWARE ... ALL FROM ] SOURCE



### Pittsburgh Steeltex Lath For Plaster

You get low maintenance and high fire protection in your buildings with Pittsburgh Steeltex Lath for Plaster. This combination of galvanized welded wire mesh and absorbent backing makes possible positive embedment of the wire mesh and provides maximum reinforcement and protection against plaster cracks. Also this reinforcement has earned high fire ratings for

Steeltex including Underwriters' Laboratories, Inc. test R-2258.

In addition Steeltex provides a rigid troweling surface which speeds its application and saves plaster. For better plaster construction see our catalog in Sweet's or write for Catalog D.S. 130 to Dept. AB. Pittaburgh Steel Products Company, Grant Building, Pittaburgh 30, Pennsylvania.

### PITTSBURGH STEEL PRODUCTS COMPANY

A Subsidiary of Pittsburgh Steel Company Pittsburgh, Pa.

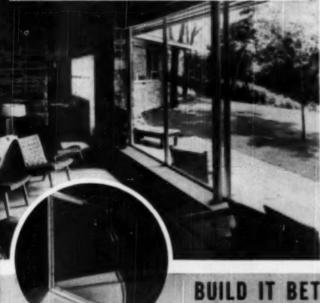




## tough job of building or remodeling?

# Glass can help you!

is there a view of the garden or other spot that makes a living picture for enjoyment from inside the house? Then frame it with Twindow, Pittsburgh's window with built-in insulation. With Twindow you not only afford your client the atmospheric beauty it creates, but you give him its many other advantages as well. Because Twindow minimizes down-drafts, cuts heat lones through windows, virtually eliminates frosting and fogging. Architect: J. P. Trouchard, Washington, D. C.





what to be with that small room? To make it look larger, to give it new life, richer personality. Pittsburgh Mirrors (either single units or floor-icelling panels) are the happy solution. Mirrors give the appearance of doubling the ruom's size. Their true reflections actually double the charm and beauty of the decorative scheme as a whole. Architect: Henry W. Johanson, Rosbys, N. Y.

See the complete listing and descriptions of Pittsburgh Plate Glass Company products in Sweet's Catalog Files.

Pittsburgh Glass



PAINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS

PITTSBURGH PLATE GLASS COMPANY

## America's Most Outstanding Truck Values

-with more power than ever!

Here are the models to make motor-truck history. These new Chevrolet P·L trucks are advance-designed for the heaviest loads, the roughest roads, the lowest cost per trip.

They are far ahead in popularity, performance, payload, price—and they are the most powerful trucks Chevrolet has ever built. There is a P-L truck for every trucking job and every one is a real leader on the job.

Observator Master Division, Connergi Master Corporation Detroit 2, Michigan

### Leading with all these PLus Features:

■ TWO GREAT VALVE-IN-MEAD ENGINES: the New 105-h.p. Load-Matter and the improved 93-h.p. The/ft-Master—to give you greater power per gallon, lower cast per load ■ THE NEW POWER-JET CARBURSTOR: amouther, quicker acceleration response ■ DIAPHRAGM SPERIO CLUTCH for easy action angagement ■ SYNCHRO-MESH TRANSMISSIONS for fast, amouth shifting ■ HYPOID REAR AXLES—5 times more durable than spiral bovel type ■ DOUBLE-ARTICULATED BRAKES—has compute driver control ■ WIDE-BASE WHEELS for increased two mileage ■ ADVANCE-DESION STYLING with the "Cub that threathes" ■ BALLTYPE STEERING for easier handling ■ UNIT-DESIGN BODIES — precision build.

## CHEVROLET

 $\mathbf{P} \cdot \mathbf{L}$ 

ADVANCE-DESIGN TRUCKS

Popularity Leaders
Official truck registration figures for 1949
show Chevolet trucks preferred over the
next two makes combined—proof of the
owner salisfaction they earn through the
years.

Performance Leaders
The new Chevrolet P-L trucks give you high
pulling power over a wide range of subble
road speeds — and on the straightaway,
high acceleration to cut down total trip time.

Payload Leaders The rugged construction and all-around economy of Chevrolet P-L trucks cut aperating and repair costs—let you deliver the goods with real reductions in cost per ton per mile.

Price Leaders The Chevrolet truck line is the very lowest priced line in the field—saves an initial cost. What's more P+L trucks give owners dollar and cents savings in maintenance and operation.

CHEVROLET



NOW a switch controlled "PLUG-IN" STRIP!



The new NE 3-wire "Plug-in" Strip is a professional multi-outlet wiring assembly with an unusual new feature: Instead of the usual two slots, each receptacle has three.

Appliances plugged into the top and center slots are controlled by doorway switches, while appliances plugged into center and bottom slots will operate independently of the wall switches. Thus, you can turn off all lamps at once, but leave the electric clock, radio, and other appliances running.

- EASY TO INSTALL. At last, full switch-controlled service of every outlet with minimum switch-leg wiring. No complicated behind-the-wall installations.
- ARCHITECTURALLY CORRECT. An unnoticeable steel baseboard trim.
- SAFE FOR LIFE. No soldered or screwed connections... a solid copper electrical system from switch box to the very last outlet. Tamper-proof because the capping is locked on permanently.
- . LISTED BY UNDERWRITERS' LABORATORIES, INC.

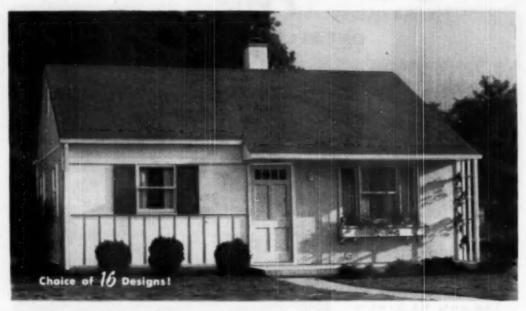
Let us send you a copy of our bookler "The New Switch-controlled 'Plug-in' Strip," and the pamphlet "An Adequate Wiring Plan for Residential Wiring Modernization."



### **National Electric Products Corporation**

1329 CHAMBER OF COMMERCE BUILDING . PITTSBURGH 19, PA.

# 50/MORE PRODUCTION IN '50



### TO MEET THE DEMAND FOR NATIONAL'S "THRIFT HOME"!

 Building a quality home at a price most people can afford pays dividends in the form of more business. That has been National Homes Corporation's experience with the "Thrift Home," now the largest-selling, low-cost quality home on the market! The nationally advertised "Thrift Home" (two and three-bedroom sizes, 16 designs) is more attractive and more saleable than ever. Latest improvement is a beautiful, eggshell satin finish on all interior walls, wood trim and doors-a "New Look" for the interior. The cost is still the same, approximately \$6,000 including ' lot, with only a few hundred dollars down,

> In some areas, National Homes Acceptance Corporation offers a source for final mortgages as well as construction money for the convenience of our dealers,

More production means the opening of more territories. If there is no National Homes dealer in your city, write us regarding qualifications. You may be eligible for a National Homes dealership.

SOME DEALERSHIPS NOW OPEN!

SEE ...

the "Thrift Home" at the NAHB Annual Convention and Exhibit Stevens Hotel, Chicago

February 19-23

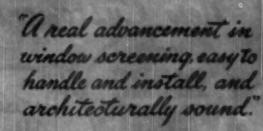
SPACE 95



HOMES CORPORATION ... LAFAYETTE, INDIANA U.S.A.

"It maps into place"





Marold Straus, Sec'y Harris Castr. Casp., Breaklyn, N. Y.

## DURALL ALUMINUM TENSION SCREENS



'no rust or stains'



"aluminum! needs no painting



"so snug fitting"



Home owners and builders who know Durall are saying all the things you read above, and more!

With its first introduction, this remarkable new hind of window screen captured the imagination—and appealed to the good sense and pockethooks—of home owners and builders alike. Over 2,000,000 are in use today!

FREE BOOKLET! Get our special, free Durall booklet, showing complete specifications and prices—for your files. Write today, Dept. AB-2. See Durall at your building supply dealer's.

West of the Rockies ask for Ry-Lock



and only \$ 3.75





NEW YORK WIRE CLOTH COMPANY . 445 PARK AVENUE, NEW YORK 22, N. Y.

## New Customers Everywhere

make MORE PROFITS for you

Muracle Walls

With the New Hi-baked Plastic Enamel Surface



### A SALES TIP FOR PROFIT-WISE DEALERS

TYLAC Dealers and Distributors everywhere are building ever increasing sales volumes — not only in homes but in the rapidly widening commercial and industrial fields where remodelling and modernization programs are in progress, or definitely planned for winter and spring. They're finding eager prospects in stores, showrooms, offices, hotels, theaters, hospitals, factories — in fact, wherever there's a business establishment they find a use for Miracle Walls by TYLAC."

And rightly so, because TYLAC Hi-baked, Plastic Enamel Surface walls combine every feature of superior excellence. Their Beauty, their Economy, their Permanence, make them the preferred interior wall coverings wherever they are shown — and that adds up to Extra Profits for Youl

Write us today for our liberal sales plan and many advertising and dealer holps.

"Miracle Walls by TYLAC to the registered trademark of the TYLAC Company to the United States.

TVLAC COMPANY MONTICELLO, ILLINOIS

PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY

# better looking applications ... perfectly aligned tile and plank ... with the

## Nu-Wood clip system

No other insulating interior finish has introduced so many improvements and refinements as Nu-Wood! Fadeproof colors . . . unique textures . . . a "foolproof" tongue and groove joint . . . these are only a few of the features which have made and kept Nu-Wood Kolor-Fast and Sta-Lite Plank and Tile leaders in their field. But there's another exclusive feature which assures lastingly true and level wall and ceiling surfaces . . . lastingly tight joints.

Read these advantages and you'll know why Nu-Wood Kolor-Fast and Sta-Lite Plank and Tile—applied by the Clip System assure satisfied owners who STAY satisfied!

### REVERSIBLE CLIP APPLICATION PERMITS CENTER-OF-CEILING STARTING



The reversible feature of the Nu-Wood Clip permits fast, correct application of tile from center of ceiling . . . easier applications, less layout time, assuring uniform ceiling border. Illustration shows clip fitted into groove.



Here is the Nu-Wood Clip fetted over the tongue of Nu-Wood Tile. Note that joint lines can be made perfectly straight because the Nu-Wood Clip permits some adjustment in the position of the tile.



IT TOOK NU-WOOD TO PIONEER THIS HISTORY-MAKING CLIP



Self-Aligning Cailings! With the Nu-Wood

Clip, irregularities of the nailing base do not affect levelness and appearance of job. The clip provides a "floating" ceiling by permitting normal movement of the tile or base. The tongue and groove joint and the Nu-Wood Clip permittile to adjust to humidity and temperature, reducing possibility of sagging tile.



Complete Wrop wood Superi! The Nu-Wood Clip completely "wrape" both the tongue and groove with metal—supporting both edges without penetrating either edge.



Tiples Joint - Joint - Serbices Buy Closest Nu-Wood tongueand-grooved Plank and Tile, applied by the Clip System, assure tighter juints. This reduces air movement through the joint, minimizing collection of surface dirt. Thus, a Nu-Wood inserior stays cleaner longer—keeps its fresh brightness. Damaged Tile are easily replaced.



Socwaly Fastoned—Mailed in Plans! See how this secure, invisible nailing holds the plank or tile in perfect alignment. The Nu-Wood Clip is sturdily constructed, easy to handle—there are no sharp points or prongs. The clip is rust-proof.

Proved by Thomask of Applicational The Nu-Wood Clip pionsered a new idea in tile and plank application—fast, dependable, srurdy and trouble-free. In thousands of jobs, large and small, Nu-Wood Tile and Plank, applied by the Clip System, have provided proved satisfaction for more than 10 years!

Sta: Lite "Kolon Fast

High Light Reflection High Sound Absorption

Nu-Wood

Wood Conversion Company, Dept. 119-20, Virst National Bank Bidg., St. Paul 1, Minnesota

Manufacturers of Balsam-Wool® Insulation, Sold by Sumber dealers only,



"N EITHER Same wer Rain wer Gloom of Night Stays these Couriers from the Swift Completion of their Appointed Rounds." A half-million men, handling 40-billion pieces of mail a year through 41,695 postoffices, make good this motto of a great service, which some how has never lost its friendly, personal touch. In buildings, too, the U.S. Post Office Department has a personality of its own. Well-constructed postoffices, large and small, set good sound building standards throughout the nation. Witness this new post office in Valley Stream, L. L., near New York City.

Masonry shows the hallmark of quality workmanship and materials in attractive wells, with five amounts.

Masonry shows the hallmark of quality workmanship and materials—in attractive walls, with fine, amouth joints, and in pleasing, even-textured interior plastering. You SEE the difference, just as the mason FEELS the difference when he puts this rich, extra-fat, easy-spreading LONE STAR MASONRY CEMENT mortar through its paces: Mortar that stays plastic until units are firmly bedded, assuring better bond . . . mortar with high water retention . . . and strength more than ample for any type masonry.

Yes, "neither snow nor rain" stays the men who work IN such a building . . . you can be sure it stays OUT of the walls!

UNITED STATES POSTOFFICE, VALLEY STREAM, L. I.







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General Contractor: MAX NOVIE, Brooklyn, N.Y.
Brickwork: E. J. AUGUSTINE, Lynbrook, N.Y.
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### LONE STAR CEMENT CORPORATION

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# in the Building Field

### **New Rise in Construction Costs**

AST March we asked "How Big A Drop in Prices?" and toresaw no substantial drop in construction costs in the immediate future. At the time residential, commercial and industrial building was falling off at a rather alarming rate which would tend to depress prices and there were reports of widespread price cuts in building materials.

The sensational increase in residential starts last summer and fall forestalled further price decreases and manufacturers are now reported to be in the process of marking prices

upwards.

By September of last year the full effects of last fall's record-breaking residential building activity had not been felt and prices had dropped from the high level reached in 1948. The wholesale price of Douglas Fir boards and shiplap was \$56.84 per thousand as compared with \$70.78 a year previous. Red Oak flooring was \$147.00 as compared with \$183.26. Yellow pine dropped from \$71.87 per thousand to \$63.33.

Outside white paint was \$4.06 per gallon in September 1948 and \$3.76 in September 1949. Insulation board dropped slightly from \$43.12 to \$42.14. Various types of windows stayed the same price or went up a

Lie

Prices of all construction materials were 7 per cent less than the year previous according to the Department of Commerce, Lumber was down 12 per cent, plumbing and heating 1.5 per cent, brick and tile were up 1.4 per cent.

General increases in labor and freight rates during 1940 prevented any substantial decrease in building costs. Roy Wenzlick estimates the cost of a standard 6-room frame house in St. Louis in 1949 dropped less than \$200 from \$14,623 in October 1948 to \$14,429 in October 1949. The same house in 1939 cost \$5,894.

The big residential building surge in the fall of 1949 can not therefore be attributed to substantial reductions in prices. Home buyers have become reconciled to prices they thought fantastic three years ago and with their relatively high postwar incomes are able and willing to pay prevailing prices.

For a period of twenty years from

1920 to 1940, the Department of Commerce index of Construction Costs showed remarkable stability. At the bottom of the depression in 1932 the index stood at 81.1 as compared with 106.7 in 1929, a decrease of 30 per cent. The index had almost regained the 1929 level by 1937 when it reached 100.9.

The factors inherent in the price structure now which make reduced construction costs improbable are the government debt of \$250 billion, Federal spending at between \$40 billion and \$50 billion a year, and the prevalence of union labor always demanding increased wages in mills, building material and equipment factories as well as on the construction site.

The most that can be hoped for in the foreseeable future is a reduction in construction costs of 10 per cent to 20 per cent and this seems improbable.

Although construction costs are related to residential building activity, costs do not fall as far as residential starts. From 1925 to 1932 construction costs fell 30 per cent while the number of new dwelling units started dropped 90 per cent.

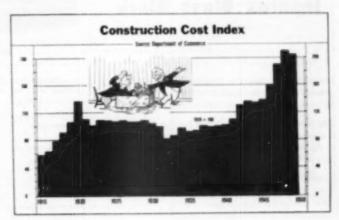
So far as the average home buyer is concerned there is one item whose cost is not inflated at all—that is interest. Two primary causes of these low rates have been the government's cheap money policy and a lack of any real shortage of lendable funds.

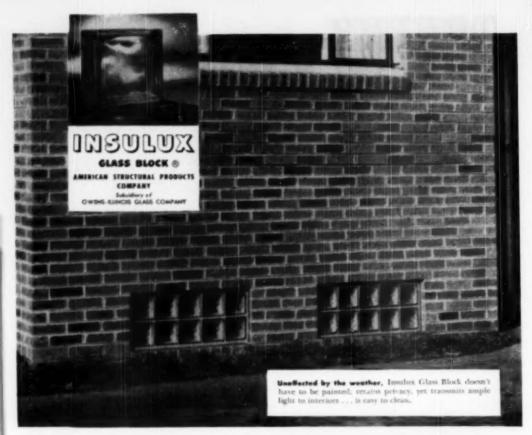
If interest rates had gone up as much as construction costs and other items, the rates would be 10 to 12 percent instead of 4 to 5 per-cent. Monthly payments under FHA of a 20 year \$10,000 mortgage at 10 percent would be \$90.50 as compared with \$66.00 at 5 per-cent. At 12 percent payments would be \$100.50 permonth. Hundreds of thousands of home buyers would be excluded from the market. That's why new homes today are attractive burgains in spite of high construction costs.

The same reasoning applies to the cost of commercial, industrial and institutional buildings. It's outside the realm of probability that costs will go down more than 10 to 20 per cent. There is a large supply of money which can be borrowed at low rates for construction of such buildings, which are sound enterprises, as well as for modernization of old buildings.

The far reaching effects of FHA financing and low interest rates are undoubtedly the factors behind the big residential construction market. In November, 93,000 new dwelling units were started, 46 per cent above a year previous when 63,600 dwelling units were started. It is expected that starts for 1950 will hit the million mark.

Prospects for 1950 are excellent. The official forecast by the Department of Commerce is 7 per cent fewer new dwelling units in 1950 than in 1949, but there is evidence that instead 1950 will see a new all-time record in housing starts.





### Practical idea for basements— Insulux Glass Block

THE use of Insulux Glass Block instead of ordinary windows is practical for many reasons:

Insulux Glass Block is unaffected by rain, snow, ground seepage, or flooded area-ways. Glass blocks do not require paint—do not rot, rust or corrode.

The thermal insulation value of Insulux Glass Block is approximately equal to an 8-inch brick wall; yet at the same time, Insulux transmits plentiful daylight to brighten up basement interiors.

Investigate the many plus advantages of Insulux Glass Block—for practically every room in every home you build. Send coupon now!



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### On and Off the Record

News, Views and Comment

RACIAL COVENANTS — FHA has amended administrative rules to bring them fully in line with the policy underlying the recent Supreme Court decisions relative to racial covenants. Effective date is Feb. 15, 1950.

MORTGAGOR CERTIFIES— Under the new rules mortgagor must certify that he will not file of record any restriction upon sale or occupancy of mortgaged property on basis of race, color or creed or execute any agreement or lease that would so restrict the property. Certification to noid good until mortgage has been paid in full or insurance contract otherwise terminated.

PUBLIC HOUSING—Preliminary loans approved at the end of 1949 amounted to \$35.862,000 to cover planning of 221,390 units in 227 localities.

HOUSING ACT—The Housing Act of 1949 provides that these units are to be built, owned and operated by local housing authorities and rented to families whose incomes are so low that they cannot afford adequate privately-owned housing.

THE QUESTION—It always was and still is—Who knows or how will it be determined who cannot afford to pay for adequate privately-owned housing? The lowest income groups are not eligible to rent the units, because they cannot pay the government rent. How much above the lowest income families may a family be to qualify? The housing act does not do what was promised—that is, take care of the indigent families.

PRELIMINARY LOANS—They are to cover all expenses a housing authority will incur for preliminary surveys, site selection studies, appraisals, and all architectural and engineering plans except the final working drawings and making final cost estimates of the units. Average preliminary loans at present are \$180 per unit.

SUCCESSFUL FARMING—The research division of the magazine's publishers made a survey of the farm building market, and discovered some interesting things destined to happen in the next 12 months.

NEW FARM HOMES.—The survey shows that the magazine's readers expect to build 50,000 horses in 1950; remodel, repair or paint 798,000 existing farm homes; re-decorate all or part of 722,000; and re-furnish 797,000. This is in line with American Builder's prediction of increasing farm building activity.

LUMBER SALES—Retail sales volumes reported to the National Retail Lumber Dealers Association for October showed an increase over September of 1.1 per cent, and an increase of 2.9 per cent over October, 1948. Lumber stocks were 7.1 per cent below those of October, 1948.

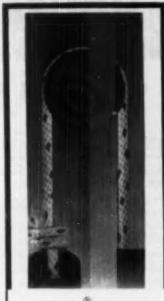
TAXES—They are looming more and more important in the public mind. Once the worker, whether he earns his living in an office or a factory, knows that of every tax dollar he pays to Washington, neither he nor anyone else ever gets more than a negligible fraction back in value of any kind, it should become easy to apply the brakes to bureancratic expansion and socialist measures.

LOCAL OPTION—A large part of it has been taken away by the Housing Act of 1949. The act does not protect a locality by making acceptance or rejection of public housing mandatory by public vote. The decision rests with the local housing authority, acting with the aid of the Federal government. Vesting such authority in an appointed body is an intrusion on local community self-

PROPERTY OWNERS - The owners of homes in any city are entitled to the right to contest public housing at the polls. It is these owners who will have to pay the additional taxes to support tax-free housing units. It is even doubtful if the "lower middle-income groups" who are getting the alleged benefits of public housing would be in favor of it if they were to be told all of the facts of cost. That is, how much their income taxes might be reduced and their net earnings increased if Federal government spending for socialistic measures were stopped.

AUSTRALIA — Recent elections resulted in the rejection of the Labor Government. This followed hard on the heels of the same action and result in New Zealand, cradle of the labor government move.

ENGLAND—Here, the Labor government is having great difficulty reconciling increasing taxes with the division of increasing scarcity.



### SPOT SASH CORD

Simplicity — no other device is as simple or as permanently efficient for balancing double-hung windows as the time-tested combination of Spot Cord, pulleys and weights. Perfect and permanent balance and noiseless operation are assured. There is nothing to get out of order.

The part that takes the wear is the cord — and Spot Sash Cord will last almost indefinitely. It is made of extra quality fine cotton yarn, firmly and smoothly braided, and guaranteed free from imperfections.

Identified by our trade-mark, the Colored Spots (Reg. U. S. Pat. Off.) Send for sample card with table showing right sizes for different weights.



### **HOUSES SELL FASTER**

## when insulated with FULL-THICK fireproof Gold Bond Rock Wool Sealed Blankets

THESE days with the cost of fuel sky-high, your customers want the best insulation they can get. That's why it pays you to insulate your bouses with fireproof, full-thick Gold Bond Rock Wood Scaled Blankets. That way you can promise your customers fuel savings up to 40% —savings that continue for the life of the house. You can promise them a home that's cooler in summer, warmer in winter. You can promise them added fire protection with insulation that's fireproof, not just "fire-resistant" or "fire-retarding." You can point out that this full-thick insulation gives the house higher resale value too.

And new Gold Bond Sealed Blankets cost you no more in installation time and costs than thin, inadequate insulation. The 8 ft. Blankets go up fast, fill the usual 8 ft. height from floor to ceiling. Make it a point to use Gold Bond Sealed Blankets in your houses . . . and advertise the fact to your prospects. It'll sell your houses faster.

• Gold Bood Scaled Blankets have a double strength stapling or nailing flange. Vapor barrier is part of Blanket. Breather cover on 3 sides for easy handling. Also Enclosed Batts in 2 ft. and 4 ft. longths with all the features of the Blankets. Blankets come in 3 thicknesses: Jumbo, Standard and Mat; Blatts in Full-thick and Somi-thick. Complete descriptive folder on request.



Fireproof Wallboards, decorative Insulation Boards, Lath, Plaster, Lime, Sheathing, Wall Paint, Rock Wool Insulation, Metal Lath and Sound Control Products.

You'll build or remodel better with Gold Bond

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### EDITORS' Round Table

LAST AUGUST there appeared on pages 72-77 a story about the "House Full of Ideas," designed and built by Mr. and Mrs. Oscar Clarbolm of Daytona Beach, Fla. Soon after the issue was out, the editors received a letter from Mrs. Cullers of Lansing, Mich.

MRS. CULLERS criticized the house on the basis that the plan lacks easy access by guests into either of the bathrooms. In every other detail, Mrs. Cullers agreed that the house certainly is a dream house.

IN THE NOVEMBER issue we replied that probably the Clarbolms reasoned that one of the bedrooms always would be unoccupied, and that access to the bathrooms as shown would not be a handicap.

MR. CLARHOLM replied to Mrs. Cullers and the editors recently as follows: "Mrs. Clarholm and I are replying to the letter which you received from Mrs. Dorothy Cullers of Lansing, Mich., saying that "Our House of Ideas" lacks easy access by guests into either bathroom. In the November issue you tell Mrs. Cullers that we built the house for ourselves, and therefore one of the rooms would not be occupied and the bathroom for that room readily accessible. You are right, in that the moddle room, just off the dining room, is only occupied when the two boys are home from northern boarding schools, and so is practically a guest room. The other bedroom in that wing is occupied by a nine-year old daughter, and she would more than likely be in bed when we are entertaining guests in the evening. Also, and not mentioned in the August issue, is the fact that just off the screen porch, about 20 feet to the south, we have a guest house, with a living-bedroom, kitchenette, dressing room and bath. This eliminates any over-night guests in the house proper, and makes for better relations all the way around. We think that we do make guests completely comfortable, and we do not want Mrs. Cullers to think we did not try to get a 'powder room' into the picture, but it was either that or leave out the har. We wanted the bar and thought that our guests could use the two baths in the house, or the one in the guest house, without too much trouble on their part."

THAT SHOULD SETTLE the

(Continued on page 61)

# **'Hot Water Sells Homes** IT'S ELECTRIC,"

The nationwide demand for Electric Water Meaters continues to grow, Sales and survey figures show that, So does the actual experience of builders—Mr. James R. Bronkens of Grand Rapida, Michigan, for example, who says: "I find on all-electric bowns easier to sell thus any other kind. My customers like to find modern automatic Electric Water Heaters in the homes they buy



These unusual homes being built by Mr. Bronkerns in Grand Rapids have five cooms and complete, all-electric equipment which includes a modern Electric Water Heater,

Modern automatic Electric Water Heaters can save you money on construction costs because installation can be made anywhere -- in the kitches, in the bathroom, or the utility room-even in a closet. This keeps hot water lines short, cuts piping costs. Customers like Electric Water Heatern because they (1) AUTOMATIC (conas but water, no attention):(2) CLEAN (prookeless. sootless); (3) DEPENDABLE AND TROUBLE-PREE (as electric light); (4) BCONOMI CAL (fully insoluted storage short hot water lines); (5) SAFE (all electric, depend able temperature control); (6) FLEXIBLE (can be installed anywhere, even in living quarters; no flue or vent).

This modern, all-electric kitchen has a constant, aut supply of hot water-thanks to an Electric Water Heater of adequate capacity



of course . . . it's Electric!

SLECTRIC WATER MEATER SECTION

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H'S EASY TO ELECTRIC WATER

in a house wired for an Electric Range!



### ALUMINUM AWNING WINDOW

the most important new development in the window industry!

The much discussed AUTO-LOK aluminum awning window will make its debut at the N. A. H. B. Convention this month. This amazing window, already in use throughout the nation, is the first window of its kind that closes tight enough and stays closed tight enough to permit effective weathering. For the first time an awning window can be used successfully anywhere regardless of weathering requirements!

Eye appeal and sales appeal are combined with flawless engineering in AUTO-LOK, the window whose vents lock automatically and can be fully opened or closed in half the number of turns of the operator than are required on other awning windows.

There is a wide range of 48 standard stock sizes and many special combination types available. Removable aluminum screens and storm sash are easily installed without the use of tools, and AUTO-LOK can be cleaned entirely from within.

A "MUST SEE" at the convention! For full details and specifications consult SWEET'S or write: Dept. A28, Ludman Corporation, P. O. Box 4541, Miami, Florida

LOK THE Pullimente IN AWNING WINDOWS LUDMAN CORPORATION, OPA LOCKA, FLORIDA

## Round Table

(Continued from page 59)

"House Full of Ideas" issue even if it proves only that the dream house of one man is not necessarily the dream house of another.

THE FACT 15 that taste in houses is about as variable as taste in men's neckties or women's hats. What one man would not wrap around his neck for any price is what another man considers to be a masterpiece of neckware. The same is true of women's hats and the houses that families choose to live in.

SAW A PLAN the other day with what most families would think should have bren a master befroom. It was truncated at the end to permit the installation of a half-bath. Not only were about five feet sacrificed from the length of the room, but the ward-robe had to be moved from the end and installed against the long wall, thus decreasing the effective width of what was left of the room.

REASON WAS that the family building the house was extrafastidious about the use of bathrooms. The man and woman wanted one placed inside the bedroom so that guests would not be likely to use it. The full bathroom was placed for the easy use of guests. A comfortable, airy bedroom was considered by this couple to be secondary to a private last.

A CUSTOMER we heard of recently berated his architect because the design of a one-story house made the dining space a combined dining room and corridor. It was necessary to walk through part of the dining space to get from the fiving room to the kitchen, and across the dining space to get from the kitchen to the bedrooms and bath.

RE-DESIGN of the plan included a corridor, usable only as a corridor, and required almost as much space as originally taken for the dining space. But the customer for some unaccountable reason was satisfied.

THAT probably is one of the reasons why few architects live long enough to retire. It is certainly the reason why one sees such queer things under the guise of livable homes.

OR ARE THEY queer things?
They're just queer, because they cater
to the special whim or whims of the
(Continued on page 63)



ANNOUNCING

# THRUSH

# Horizontal water circulator

HERE is a new Thrush Water Circulator to provide Forced Circulating Hot Water Heat for small or large homes and smaller commercial buildings. This new horizontal type circulating pump incorporates all the time-tested features which have made Thrush a leader through the years. Whenever you want to provide the best in radiant heat, specify Thrush Forced Circulating Flow Control System of Hot Water Heat. It provides summer-winter domestic hot water from the regular heating boiler, Installation savings place it well within the reach of the modern, low cost home.

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- \* Positive forced circulation, quiet, free from service troubles.
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SEE OUR CATALOG IN SWEET'S
OR WRITE DEPT. G-2 FOR MORE INFORMATION

PORCED CIRCULATING HOT WATER MEAT

## Round Table

(Continued from page 61)

families who want things the way they want them whether they conform to what generally is considered good practice or not.

CONTRA COSTA COUNTY is in California, and it has an NAHB chapter called the General Contractors Association of Contra Costa County, inc. If that is a large name, and it certainly is, it isn't too large for the kind of builders in it. Local public housing authorities and city councils in the county are finding that they have something to contend with before they saddle the citizens with the tax burdens that will come from public housing developments.

FREDERICK C. KRACKE, the association's executive vice president, has exercised his right as a citizen to protest every proposed public housing project which in his judgment is unnecessary and wasteful. He gets results, too.

DALLAS, TEXAS is another city in which the public housers have to prove that there is need, and not merely a desire to grab some Federal pap. The Home Builders Association of Dallas prepared an exhaustive statement for the city's council, in which Grover Godfrey, executive vice president, and his associates revealed to the council some of the perils and headaches inherent in mass public housing that the council members had not thought of.

NO ONE in the building industry, as far as we know, ever has said or implied that there is no need for shun clearance or housing the needy. The Californians and Texans mentioned above are not saying anything like that either. What they are saying is that if there is local need for either or both the problem should be accepted as a local problem, and solved locally with local legislation, local enforcement and local money.

THAT, ALSO, as far as we know, is all any opponent of Federal public housing has ever said. But that statement and the solid arguments behind it make no impression on the advocates of a regimented economy.

BUILDERS everywhere will watch with interest for the result of the grass roots battles being waged in many places, only two of which are Contra Costa County and Dallas.





Quiet, powerful, compact



New automatic ceiling shutter

### Easily installed—provides cool comfort for kot summer months

Hunter Package Attic Fan is a complete home-cooling system . . . tow in initial coot, economical to operate and designed for fast, inexpensive installation. No other small investment gives home-owners so much summer comfort.

tony to install Delivered on the job at a compact unit, complete with ceiling shortter and modern metal trim, the Package Fan is quickly installed in ceiling opening. No suction-box to build; no accessories needed. Requires only 17" attic clearance, fits any standard hallway.

Performance Gostanteeth: Quiet, troublefree operation is assured by Hunter's 64years' experience in monufacturing fans, exclusively. Available in capacities from 4750 to 9500 CFM, with air delivery ratings certified. Fan guaranteed 5 years; motor and shutter, 1 year.

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Send copy of "How to Cool for Comfort" to?

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You can give your clients

The famous Flame of Freedom House featured in Better Homes and Gardens, designed by David Searcy Barrew.

### How you can offset cost of All-Year air conditioning

By deciding to use All-Year Air Conditioning in the early planning stage, you can make enough economies to give your client year-round comfort at little or no extra cost. Moreover, the features which you would eliminate—such as a screened-in parch, fireplace, attic fan, conventional heating plant—afford comfort only for a short period of time, while All-Year Air Conditioning provides your clients with the ultimate in comfort all year-round.



NO FIREPLACE



NO STORM SASH



NO PORCH



LOWER COST WINDOW CONSTRUCTION



NO SCHEENS



NO ATTIC FAN

# air conditioning Little or no extra cost!

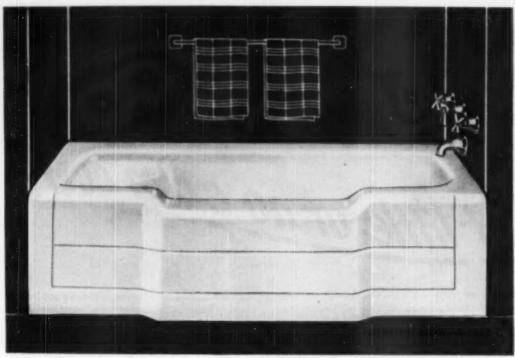
TODAY, everyone wants the convenience and comfort provided by Servel All-Year Air Conditioning in their homes. You can provide your clients with this modern unit simply by planning your homes around a Servel Air Conditioner. Recent studies and cost estimates have indicated that you can do it without increasing the total price. The reason for this is that, by planning around a Servel unit, you gain certain structural economies which offset the price of the Air Conditioning.

For instance, a house designed for Servel All-Year Air Conditioning needs no fireplace. It needs no porch. Outside doors and windows can be kept closed and many windows need never be opened at all. That means a big saving on screens and storm sashes. In most parts of the country the total savings would more than offset the cost of the Air Conditioning.

Keep that in mind when your clients ask you about Servel All-Year Air Conditioning. Keep in mind, too, that Servel provides them with year-round comfort . . . refreshing cooling in summer and instant heat in winter. And changeover is accomplished by a mere flick of a switch.

Keep in mind, also, that the use of Servel All-Year Air Conditioning is not confined just to one type of architecture. It can be easily adapted to any type, style, size, or shape of home your client wants. Remember, by including the Servel unit in the original plans, you can provide it for your client at little or no extra cost. For full facts, ask your local Gas Company, or write direct to Servel, Inc., 1002 Mcrton Ave., Evansville 20, Indiana.





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### MORE SAFETY

Low front rim... makes it easy for old folks or little ones to step in or out of tub. Bottom of tub is flat for extra safety.



#### MORE CONVENIENCE

Wide front rim-sent makes it easy to bathe children either in the tub or sitting on end-sent. Also ideal for foot bathing.



#### MORE COMFORT

Comfortable end-seat for a luxurious sitting shower. Tub is full-length inside with sloping end for a restful reclining bath.

### EASIER CLEANING

Rectangular in shape so all parts are within easy reach for cleaning . . . lustrous surface wipes clean with a damp cloth.



#### SUPERB BEAUTY

Glasslike, satin-smooth finish in snow white or soft pastels. Sparkling chromeplated brass fittings.



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Extra-thick, vitreous enamel is fused to a rugged, rigid cast-iron base for permanent beauty. All wearing parts fittings are renewable for long, trouble-free operation.



It pays you, it pays us - because we specialize in Plumbing Fixtures and Brass





## **ASSOCIATIONS**

Their Plans and Activities



### Interest High in American Builder, NAHB Home Design Contest for Women

Ninety-three women, approximately one-third of the women architectural students in colleges and universities in the United States and Canada, have registered for the Prize Honses Competition sponsored jointly by the American Builder and the Women's Divison of NAHR.

Six prizes, totalling \$1,000, will be awarded in the contest, believed to be the first of its kind for which eligibility has been limited to women. In addition to the cash awards, winners of the first three prizes will be guests of the sponsors at the NAHB convention in Chicago. Feb. 19-23, where 16 outstanding entries will be on exhibit.

The purpose of the competition is to encourage development of designs of single-family dwelling units for families in the middle income bracket. Dwellings may be one or two stories, are limited 1,300 square feet of floor area and are suitable for sites having a depth of 150 feet and a frontage of 75 feet. It is believed that the emphasis on the woman's point of view will produce a number of new thoughts and ideas in domestic architecture.

Comprising the jury of awards are Arthur V. Hansen, architectural editor of the American Builder, Robert E. Sangster, editor, Small Homes Guide; Charles Joern, builder, Latirange, Ill.; Martin H. Braun, architect and builder, Oak Park, Ill.; Lee Cochran, associate architects with Perkins & Wills, architects, Chicago; Walter T. Anicka, architect, Ann Arbor, Mich.; and Mrs. R. H. Morris, bousewife, Highland Park, Ill. Judging will take place Feb. 9 at the headquarters of the Chicago Metropolitan Home Builders Association.

The three top winners will receive their awards at the opening of the Women's Program to be staged in the Grand Ballroom of The Stevens, at 10:00 A.M., Mosslay, Feb. 20. Prizes will be awarded by E. G. Gavin, editor, American Builder. At that time the winners will be given an opportunity to untilize before the assembly some of the features of their prize-winning entries.

Also included in the contest winners' Chicago visit will be a dimer, press conference and review of the convention Feb. 19. On Feb. 20 they will be guests of the Women's Division for breakfast and of the American Builder for a buffet lunch. Opportunities for sightseeing and shopping tours will be offered the following day.

### Taft Talks on Housing At Ohio Convention

The sixth annual convention of the Ohio Home Buildors Association at the Biltmore Hotel, Dayton, Dec. 5-7 in-tured the views on housing problems of a coster of nationally-prominent speakers, beaded by the toted Republican leader, Senator Robert A. Taft of Ohio, Other highlights included several panel discussions which elicited wide interest.

Senator Taft spoke on public and private housing. Other speakers included Edward G. Gavin, American Builder editor, who delivered the keynote address: Edward R. Carr, NAHB past president; NAHB President Rodney M. Lockwood; FHA Commissioner Franklin Richards; Frank W. Cortright, NAHB executive vice president; Gates Ferguson, advertising director, Celotex Corp.; and James Downs, president, Real Estate Research Corp.

Panels were beld on "Mortgage Fimance," "Building a Better Home in 1950," "Merchandising a New Home," and "Selling New Homes,"

Elected president for the 1930 term was Ivan H. Gore of Columbus, vice president in 1949.

### **Dallas Hoo-Hoo Reorganized**

The Dallas, Texas, Hoo Hoo Club, holder of Charter No. 75, has been reorganized after a period of inactivity during the war and early postwar years.

### Long Island Builders Re-elect Frank

Leonard L. Frank, of Roslyn, president of the Long Island Home Builders Institute for 1949, was re-elected for 1950 at the organization's annual meeting in December, There were 183 members at the dinner held at the Stewart Manor Country Club.

In a comprehensive review of the year's activities, President Frank reported that home huiders in 1949 erected more than 36,000 new dwelling units in the four counties of Long Island. In discussing the outlook for 1950, the uncertainties of government policies and legislation were listed as an important factor. "It is regrettable," Frank said, "that while government gives its own agencies a long-range building program in the form of a six-year public housing plan under the Housing Act of 1940, private enterprise has been given nothing but stop-and-go consideration."

The many accomplishments of the Institute during the past year were reviewed in the report. Legislative activities, exoperative efforts with local building officials and utility companies, work (Continued on page 72)



LEONARD L. FRANK (right), won re-elected precident of the Long Island House Builders Institute at the group's recent annual meeting. Other officers are (left to right): Fred E. Cibson, vice president for Hosson County; Jumes Grahem, re-elected secretary; and Fred J. Dolan, vice president for Suffolk County. New officers not included in protute are Sidney Keesler, vice president for Brooklyn-Queens and Cy Williams, transucer.



### Cy Sweet Says -

C. B. SWEET, President, Hotional Rotall Lamber Dealers Association

As this is being written, another year has drawn to a close, and as is customary, most business med have taken inventory of their merchandise on hand, checked their equipment and personnel for necessary replacements, and planned their financial requirements for the coming year. This procedure is common practice with well managed businesses; in fact, it is demanded by the stockholders. Unfortunately, however, the biggest business of all, your government, does not follow this course and, so far, the stockholder-the people-have not demanded it

Let's look at a few inventory figures of just one division of your government, the Commodity Credit Corporation

- Nearly ave million bales of cetton, worth about \$750 million.
- Nearly 400 million bushels of wheat, worth 2000 million enough to give every person in the United States a loaf of bread per week for a full year.
- Approximately 600 million bushels of corn.
- 4. More than 70 million pounds of dried eggs—enough to last United States bakers five years.
- About a quarter of a million pounds of dried milk, worth over \$30 million.

This by no means exhausts the list, but it does give an insight into "planned economy."

How long do you think your business could continue if you had 47 salesmen calling on 1500 people? Yet the Hoover Commission found that 47 agents of seven separate services were calling on 1500 farmers in one cotton county in Georgia; that 88 agents were working among 340 tarmers in one county in Maryland.

Would you consider it economical and good business to operate trucks that were 15% years old? I am sure you would not, but the 10,000 trucks operated by the Post Office Department were, on the average, 15½ years old, as of May 1948.

How long could you continue in business if you ran a deficit of 29 per cent of your sales? The Post Office Department did that last year, and it amounted to secondors

How would your business prosper if the operating report from your bookkerper or auditor was eight months late? The Post Office Department gets its report eight months after each quarter's end, from the Comptroller General.

How would your business get along if you had a 25 per cent turn-over of personnel? The biggest business in the world has that record.

How fong would you keep a stenographer on your payroll who was unable to take and transcribe acceptable dictation, was a chronic trouble maker, and had a questionable character? Your Federal government kept such a person on the public payroll for a period of 17 months after it had all of the above information.

The fact that all of these things are happening to YOUR government, rather than to your business, makes it no less your concern. Remember, YOU are paying the bills and YOU are a stockholder in the world's largest business. Exercise your prerogative and see that you have proper management that will carry out your wishes. Tell your Congressmen.

### St. Louis Home Show Set for Feb. 11-19

The 1950 St. Louis Bildors Home Show will be belt at Kiel auditorium in St. Louis Feb. 11-19. H. J. Loosley, managing director of the event, association is endorsed by the Home Builders Association of Greater St. Louis and the St. Louis and St. Louis County Chambers of Commerce and is staged in collaboration with Better Homes and Gardens magazine.

The show is also supported by the

mayor and city officials, the Construction Industries Cosmeil of the American Federation of Labor, firms in the construction, home appliance and home furnishings fields, public utilities and trade associations.

The St. Louis Bildors Committee which will assist Loosley includes Ralph S. Duke, chairman; John Bogdanor, Schuorman Budding and Realty Co.; Rime Dusard; Adrian Koch; Silvio Lombardi, Lombardi Construction Co.; and Richard Phillips, Missouri Floor Co.

### Dayton Association Appoints A. H. Falace Secretary

A. H. Falace has been appointed executive serretary of the Montgomery Country Builders Association, Dayton, Otios, succeeding the late E. Clarke King, it has been amnounced by Association President Stanley Swargo, Jr.

Falace, a former Dayton resident, recently returned from Waxhachie, Texas, where he served as manager of the Chamber of Commerce and the Community Chest. He had previously been manager of the Dayton Chamber of Commerce Industrial Department and a



A. H. FALACE

member of the staff of the Industrial Commission of Ohio, He has also been assistant executive manager of the Springfield, Ohio, Chamber of Commerce and manager of the Springfield Safety Council.

A graduate of Ohio University, Oxford, he has done graduate work there as well as at Ohio State University, and has completed special courses at the National Institute of Commercial Organization Secretaries and the Southwestern Chamber of Commerce Institute.

Professional organizations of which Falace has been a member include American Society of Safety Engineers, National Association of Commercial Organization Secretaries and the Texas Chamber of Commerce Managers Association.

### Prominent Speakers Slated For Michigan Dealer Meet

Senator Homer Ferguson of Michigan will be one of the featured speakers at the filst annual convention of the Michigan Retail Lumber Dealers Association Feb. 7-9 at the civic auditorium, Grand Rapids.

Other prominent speakers will melude H. R. Northup, NRLDA executive vice president; C. A. Fulton, NRLDA vice president; Clayton Rand, Gulfport, Miss., publisher; Col. Robert Brooks, real estate analyst of the Roy Wenzlick Co., St. Louis; and Philip Creden, chairman of the NRLDA public relations committee.

The exhibit flour will be completely filled, with more than 100 display booths. Popular social events which will be held again are the Old Guard Dinner, Salesmen's Midnight Frolic and association basquet.

### Oak Flooring Manufacturers Name Milton Craft President

Milton Craft, president of Chapman and Dewey Lumber Co., Menghis, Tenn., was elected president of the National Oak Flooring Manufacturers' Association at its recent annual meeting in Menghis. He succeeds Allen Harris, Jr., ware president of the Harris Manufacturing Co., Johnson City, Tenn., who held the post for two one-year terms.

Craft, a veteran of the lumber business, has been active in the association for a number of years and served in 1949 as vice president and board of directors.



MILTON CRAFT

member. He was re-elected to the board along with the retiring president.

Re-elected vice president and director was T. C. Matthews, cales manager of the M. B. Farrin Lueber Co., Cincinati, Henry H. Willins of Memphiwas re-elected secretary-treasurer.

Four new directors were named: T. W. Bond, Cloud Oak Flooring Co. Springfield, Mo.; J. W. Fowler, general manager of Frost Hardwood Floors. Inc., Shreveport, La.; S. B. Fullerton, Bradfey Lumber Co., Warren, Ark.; and Earl M. McGowin, vice president of the W. T. Smith Lumber Co., Chapman, Ala.

Other directors are L. C. Ailor, Miller Brothers Co., Johnson City, Teen.; R. M. Lindsay, Veach-May-Wilson, Inc., Alcoa, Tean.; B. A. Mayhew, Fordyce Lumber Co., Fordyse, Ark.; J. G. Smith, Arkansas Oak Floering Co., Pine Bluff, Ark.; and Walter Wood, E. L. Bruce Co., Memphis.

### Named Committee Head

Sylvester J. Lowery, prominent Philadelphia builder and real estate man, has been appointed chairman of the advertising committee of the Home Builders League of South Jersey. Lowery and E. J. Frankel are currently building Collingswood, an apartment project at Park View, N.J.

### Adopt Group Insurance Plan

The board of directors of the Oklaboma Lumbermen's Association at a recent meeting adopted the group insurance plan of the North American Accident Insurance Co. Officers said that the plan will be made available to members only and that, operating as a group, costs could be substantially reduced.

### Cortright's Column

FRANK W. CORTRIGHT. Executive Vice President National Association of Home Publishers of the United States



Everyone talks about preserving our free enterprise system and practically nobody does anything about it!

In fact, the handful of men who are earnestly striving to awake the people of this country to the full distance we have already traveled on the road to a Social Welfare State receive commendation and applause but know in their hearts they are accomplishing very little. It is a common obstructeristic of all of as to believe that OUR boats will never barn down.

The most convincing example of this human lethargy is found in the futile broadcasts of Winston Churchill over a five-year period, warning the people of England that the most powerful military machine in history was being built only an bour's flying time from their island home. Not only over his urrawings diregarded has he was condemned and decried as a warnouger, elarmist and oweny of the people. How, then can any people be thoroughly aroused over the loss of their individual freedom when they refuse to be alarmed over invasion, rape and destruction of their very homes and families?

Benjamin Franklin, one of the wiscot men the world has known in 1900 years, thoroughly understood this weakness in human nature. He and the others who founded our American system know ladl well that Individual and Economic Liberty could not exist where Economic and Individual Security were promised by a revialist government. He and others of the 28 delegates to the Federal Convention of 1787 were wise enough to anticipate a day when Security would be offered as a bribe for the Liberty which he and his compatriots risked their necks to establish—hence his warning.

With complete disregard of political affiliations, James Byrnes, General Eisenhower and Herbert Hoover have recently said the same thing in different words. By whatever name it may be called—"New Liberalism," "Dynamic Democracy," "Socialism," or "The Welfare State"—America's really great men are presently endeavoring to warn the people. Tragically coorage, their wavaings, like Churchill's, are commended by a frue—and scoffed at by the most.

Senator Harry Cain of Washington has expressed most succinctly the three other methods by which we may lose our freedom.

The first of torse is the danger of Frderal bankenptey. Impossible? Not at all. Consider that our current debt is \$256,000,000,000... our Federal budget of \$24,000,000,000 till loaves an annual deficit of \$3,000,000,000.

President Traman has spent \$191,000,000,000 daring the last five years, on anount equal to the total Federal expenditure in the 168 years since George Washington's Presidency!

The Senator warns that a one-party system, similar to the Labor Party which has governed England for the last 25 years, is quite possible. Our labor unions, operating with assets of more than \$1,000,000,000, are presently working day and night to eliminate all Congressmen who have opposed the dictates of labor leaders.

Finally, and a far more subtle danger, the Senator warms that the legislative branch of government—the Congress—is increasingly controlled by a powerful and dictatorial Executive branch, the White House. Our three-way form of government, judiciary, legislative, and Executive, so carefully halanced by the Founding Fathers, is already out of balance by a politically packed Supreme Court. Through the shreed use of political patronage, the dominance and dictation of the White House may well destroy the freedom of the people's code in government—the Congress.

When will the selfish objectives of special groups—including labor, the farmers and the voterann—be reduced for the beautit of all? At what point will the collection of tax dollars by a central government for bureau-cratic redistribution back to the people become on high as to cause a revolt? When will the critices, the property owner, and all the American people wake up to the fact that they must choose between Security deled out by a Beneficial Central Power and Individual Freedom to face the ricitionales of life individuals?

Let's hope it will be soon!

### Craftsmen Complete Association Course



GROUP of crofismen who recently completed apprentice training spanacred by Marian County Residential Builders is shown with officers. From left, seated: Elmer E. Moodley, casociation executive secretary: Thomas Hilton. Thomas E. Ramsey: Fred L. Pulmer, association apprentice training committee chairman; M. L. Hall, association president: Porry McCain. VA nationing officer: Bulph J. Erney. Walde Raybeurne, Bussell L. Renard: (standing) William W. Sendors, Philip E. Montgomery, Charles McConnell, Albert C. Weintraut, Charles Sutton, Paul L. Lawhorn, James Trimble, Heath B. Chappell, James W. Wells. Wallis Day, Jr., Alvin Kennard, Jr., Clarence E. Bracket, Edwin C. Lucao, Albert J. Dranorou.

Twenty-seven craftsmen, the first class to complete a three-year apprentice training course conducted by the Marion County Residential Builders, Inc., Indianapolis, were awarded certificates of completion Dec. 5. The ceremony took place at the NAHH affiliate's 10th animal meeting at the Antlers Hotel, at which the craftsmen were dinner guests.

The program, one of the first in the country conducted by a builders association, is available to all members who care to take part. It was begun in February, 1946, when the first class, for carpenters, was approved. The 27 men who received certificates in December were an accumulation of completions since summer.

At present there are courses for nine crafts in the home building field: carpenter, electrician, plumber-steamfitter, plasterer, painter-decorator-paperbanger, cement finisher, sheet metal worker, bricklayer-stonemason and linoleum layer.

The association tentatively plans to hold completion ceremonies semiannually. It is hoped that approximately 50 men will complete training each year, many of whom will become permanent members of association members' production crews. Already organized is a system of registration and transfer to employees from our builder to another to effect peak employment and to meet special work needs.

Fred L. Palmer, chairman of the apprentice training committee, awarded the certificates.

### 'Home Builders Frelic' Climaxes Membership Drive



FRED C. LOUCKS, chairman of the membership committee of the Home Builders Association of New Orleans, holds gift presented by Harrold I. Fuilet, association president, for outstanding work in the New Orleans group's recent successful drive which noted 114 new members

### Building with Modular Brick Brings Economies, Small Homes Study Shows

The economy of building homes with modular-size brick and tile has again been demonstrated, according to W. J. Goodwin, president of the Structural Clay Products Institute which has sponsored studies in the field at the University of Illinois Small Homes Council.

Goodwin said that new research now indicated that brick masons' working time can be reduced approximately 10 per cent through the use of modular materials in small homes.

"In 1947," Goodwin stated, "the Small Homes Council analyzed costs of building three identical houses using roodular brick and cavity-type masonry wall. This summer an exact duplicate of the 1947 house was built, using non-modular brick.

"A comparison of Lanes-study data during construction indicates that the number of man hours of labor can be reduced nearly 10 per cent, even on a simple structure, by use of modular materials. Furthermore, an examination of

### To Test Research Findings On Home Construction Sites

A field test program using actual construction sites as laboratories will be carried out by NAHB in cooperation with the new Building Advisory Board of the National Academy of Sciences. Amounteement that the program is about to get uider way was made by Carl G. Lans, NAHB technical director.

Laboratory projects judged ready for field testing are being listed by William H. Scheick, executive director of the Advisory Board in cooperation with Lans. NAHB members will be selected for field applications of laboratory results, with the idea of developing data on speedier and more economical construction.

During the course of the "observation projects," close study will be made of application, organization of work, personnel and materials and time and motion studies. Each builder will deliver a report on his own project.

The project was described by I'rank W. Certright, NAHB executive vice president, as "upening the way for practical field testing of developments worked out in research laboratorica."

### Apprentices Learn Carpentry By Building House at School

The students and instructors at the apprentice training school of the Home Builders Association of Metropolitan Washington at Ayrlawa Farus, Bethesda, Md. believe that the best way to learn to build a house is to build one. They are working on one now; the finished product will be 12x12 feet, built indoors in one of the classricous.

Using the talents of instructors who have had long experience in the field, enjoying splendid cooperation from the Board of Education of Montgomery County and the Maryland-National Capital Park and Planning Commission, the school is gaining recognition as one of the outstanding in the field. Generous contributions of material and supplies are made by association members.

William C. Mitchell, superintendent of Twinbrook, Inc., is school supervisor and Spencer Lawson, Silver Spring, Md., contractor, is the carpentry instructor. Chairman of the school is Robert R. Furman, Bethesda, Md., builder.

The first four weeks of the course consist of classes explaining carpentry as compared with other building trades; study of types of wood and their different applications; uses and care of tools; and techniques of sawing, nailing and planning. In the fifth week actual construction of the house is begun. Power tool technique is taught only in the advanced classes.

the brickwork shows that workmanship improved through the use of modular material at no additional expenditure of labor."

### 30-Day Courses Increasingly Important in NRLDA Educational Program

One of the major phases of the effactational program of the National Retail Lumber Dealers Association is its 30-day lumber dealer short course. Since the fall of 1946, when they were started, 86 of the courses have been conducted in major universities and colleges. More than 3,500 veterans and retail lumber dealer employes have been sent to these intensive training schools at no cost to themselves. Graduation has frequently lead to advancement and in many instances to management of lumber yards.

The courses have covered 35 subjects with class lectures and discussions led in part by regular university staff instructors and to a large extent by more experienced in the field covered by the subject. More than 30 textbooks are now used in the courses. Visual aids, slide sound films, movies and demonstration models are part of the instruction technique. Field trips to mills, factories producing building materials and to lumber yards where the work of the industry can be observed, are important parts of the specialized training.

During the current term 15 universities and colleges have scheduled twentyone 30-day short courses in lumber dealer training. They are: City College of New York, New York City: Georgia School of Technology, Atlanta, Ga.; University of Illinois, Urbana, Ill.; University of Kansas, Kansas City, Mo.; University of Massachusetts, Amberst, Mass.; University of Minnesota, Minneapolis, Minn : Michigan State College, East Lansing, Mich.; New York State College of Forestry, Syracuse, N. Y. Ohio State University, Columbus, Ohio, Pennsylvania State College, State College, Pa.; Purdue University, West Layfayette. Ind.; University of Southern California, Los Angeles, Calf.; Southern Methodist University, Dallas, Texas; University of Washington, Scattle, Wash.; University of Wisconsin, Madi-

Details on the dates of short courses in these schools, and other facts, may be obtained by contacting the regional or state dealer association sponsoring the course, the school itself or the NRDLA offices in Washington, D.C.

More visual aids were recently added to intensify the sales training program. These may be used in connection with the 30-day short course or in district and group dealer meetings throughout the state or regional association areas. The material consists of slide sound films, booklets and questionnaires for salesmen, and covers a total of nine topics: "How to Turn Buying Motives Into Sales; "How to Take the Lead in the loterview:" "How to Conduct the Demonstration:" "How to Plan Your Sales Talk to Keep Out Competition," and "How to Turn Objections Into Sales," are some of the topics covered

### Oklahoma Dealers' 1950 Plans Include Projects for Public Service



OKLAHOMA Lumbermen's Association officers and directors (from Seft, sifting): W. K. Hicks, Frederick: Sy Akard, Exid: President Walher Hinton, Altus: Vitro President Dukenhard, Okiahoma City: Tresurure Alfred Lonnhardt, Okiahoma City: L. O. Williams, Sallisaw; (standing) W. M. Marquin, Okiahoma City, executive secretary: L. I. Parks, Lawten: Virga Steper, Duromit Leolin Sayre, Marmon: Hoph Hannon, McAlester: Tod Boppess, Ponca City: Jack Bell, Shawnon: J. D. Bartint, Clinton: Walter Kelly, Tulen: Barnoy Saweuri, Jr., Okiahoma City: and Rubu Jackson, Okiahoma City: secretary

### Historic Cabin Renovated By Dallas Home Builders As Service to Community

The Dallas Home Builders Association, as a community service, recently sponsored the renovation of the old John Neely Bryan log cabin on the Dallas Cannty courthsuse lawn. In addition to repairs on the historic structure, erected by the founder of the city, a concrete foundation was placed, a protective cauopy built and a cement walk laid.

Special ceremonies held at the beginting of the job were attended by city and county officials and association members. Members of the Builders committee that supervised the project were George A. Jackson, Lacy R. Keele, Robert S. Shelburne, H. D. Lewis and Morris Silberman.

Approximately 50 builders furnished either labor or materials for the work, with Architects Harwsoud K. Smith and Joseph N. Mills providing the plans. Grover A. Godfrey, association executive vice president, estimated that the entire project would have cost about \$2,500 if undertaken on a commercial basis.

### 30 Bricklayers Graduated From Association School

Graduation ceremonies were recently held for a class of 30 advanced bricklaying students at the Ayrlawn Farms Trade School, The school is one of the outstanding projects of the Home Builders Association of Metropolitan Washmeters.

A number of building material firms which have donated materials to the institution were presented meritorions award certificates.

A large group of builders dealers, contractors and subcontractors attended the graduation exercises. Projects for 1950 were outlined and 1949 accomplishments reviewed by directors of the Oklahoma Lumbermen's Association at a meeting Dec. 9 in Oklahoma City. The meeting, at which the new budget was set, was the first called by the newly-elected president, Walter Hinton, George C. Wright Lumber Co.,

Among the highlights of 1949 activities were: Lausching of a farm program which was given national recognition in magazines and was runner-up in the NRLDA public relations contest; conducting of two 30-day immbersamen's training schools at Southern Methodist University in collaboration with Texas and Louisiana Associations; adoption of group insurance plan for reembers; publishing of association's first directory and buyer's guide; and conducting, in cooperation with Oklahoma A, and M. College, of a state-wide one-day farm building program.

Projects approved for 1950;

Establishment of begislative council to work on state and national legislation; one-day sales training short courses to be held in connection with all district meetings; continuation of farm building program with A. and M. College; continuation of 30-day training schools, a two-day membership drive in January, with awards to district winners; and an intensified public relations campaign.

Dates set for the 1950 convention are Oct. 17-18.

### Pennsylvania Builders Show Set for March 6-11

The seventh annual Central Pennsylvania Builders Show, spomored by the Harrishurg Builders Exchange, will be held at the Farm Show building, Harrishurg, March 6-11.

The exhibition attracted approximately 305,000 visitors in 1949 and 189 exbilitors.

### Optimism Marks Shingle Bureau Meeting

Shingle producers from Washington, Oregon and Britsh Columbia who attended the 33rd annual meeting of the Red Cedar Shingle Bureau recently held in Seattle were given optimistic accounts of enlarged markets for cedar shingles as well as of augmented production.

W. W. Woodbridge, bureau secretary-manager, said that the industry's productive capacity has been growing steadily since the end of World War II and that the current rate is approximateiy 7,000,000 squares a year. Woodbridge attributed the increased demand largely to these factors: a record of storm and wind resistance in the middle west; acceptance for multi-unit housing developments by many large builders; and a tremendous increase in the me of shingles and processed shakes for side wall construction.

Convention speakers included M. L. Clement, director of the Southern Building Code Congress; C. B. Sweet, NRLDA president; E. L. Conner, president of the Stained Shinele and Shake Association; and W. C. Bell, managing director of the Western Retail Lumberson's Association.

E. R. Scott was re-elected president of the bureau for 1950 and Vice President W. H. McLallen was also returned

### Long Island . . . .

(Continued from page 67)

with FHA and VA, expansion of membership and service to members all addof up to an impressive record.

Eruest Beck reported on finance committee work at the Miami meeting of the National directors in November. Cleaster Pynn reviewed his committee's work on building codes and Rudolph Matern covered the accomplishments of the economy house committee during 1949. James Grabam, who was re-elected secretary of the Institute at the meeting, submitted several proposed amendments to the constitution.

Other officers elected for 1950 are: Fred E. Gibson, of Rockville Centre, vice president for Nassau; Sidney Kesler, of Jamaica, vice president for Brooklyn-Queens: Fred J. Dolan, of Islin, vice president for Soffolk, and Cy Williams, of Port Washington, treasurer, Ernest C. Beck and Alfred Gross, both of Jamaica, were re-elected as directors. New directors are Samuel Levin, of New Hyde Park; David Strausman, of Hempetead and Frank Clauson, of Rodyn. Directors who continue in office are: Kalman Klein, of New Hyde Park, chairman; Adolphus Flowers, of Merrick; Charles M. Jaeger, of Rockville Centre; Robert J. Rose, of Great Neck, and Saul Sokulov, of West Hempshead

New members-at-large of the executive committee are Andrew T Callan, of Manhasset and John Van N. Meyer, of Forest Hills. Otto J. Hartwig is exocutive secretary of the Long Island Home Builders Institute.



IMPRESSIVE display was made at the Red Coder Shingle Sureau's ensured meuting by pile consisting of 30,000 inquiries for intermetion on coder shingless. Note work nequiries about the Codingrade Metionel Rome. Encontaining pile are (light to tight C. S. Sweet NELDA president; W. C. Bell, managing director of the Western Retail Lumberman's Association; W. W. Woodbridge, bareau secretary manager; and V. G. Peterson, bureau treasures.

to office. Other trustees elected were: Dale Craft, N. A. English, R. H. Farrington, Keith G. Fiskon, N. C. Jamison, J. A. MacKenrie, R. D. Mackie, Charles Plant, Fred A. Roles, C. C. Rose, Paul R. Smith, H. V. Whittall, Earl S. Wasser and R. A. Wilde.

Of particular interest was the annonneument that bureau's membership increased by 17 mills and 63 machines during 1949. Membership currently totals 112 mills and 617 machines.

### Jersey Group Re-elects Officers

The entire slate of officers of the Home Builders Association of Northern New Jersey was re-elected at the annual meeting in December, attended by 112 members. The chapter was especially active during the past year in working for the interests of its home builder members. Cooperative efforts with building authorities, FHA, VA and legislative work was outstanding. This

fall the group spent much time and effort in combating the New Jersey public homoing law. Sixty-one new members were added to the membership in 1949.

Officers for 1950 are: Carl S. Carlson, president: Stephen Dudiak, vice president: Albert A. Stier, secretary: John S. Cucchiara, treasurer and Clarence J. Von Drehle, executive director.



OFFICERS of the Home Builders Association of Northern New Jersey for 1950. Left to right, front row: George I, Marcus, quencral counsel; Joseph J, Brunetti, director: Stephen Dudink, vice president: Carl S, Carlson, precident: Joseph A, Goldman, director: Season Willis, director: Milton E, Zerman, director: Second row, left to right: Michiel Petrusku, director: Charies Castanzo, director: Dayle E, Bush, director: Clarence J, Von Drehle, associative director; Alan D, Allen, director: John S, Cucchiara, trecourse and Albert A, Biter, secretary and NANB director. Officials not on the picture are: Rolph Carlette, director and NANB director: Fred Inquanamorie, director: Charles H, Beis, director: Emmunul Spiequi, director and regional vice president of NANB

INFRA INSULATION Type 6

Cost of lafra installed between wood joints, in new construction, for material and labor, should be under 10c per sq. ft, for Type 6; under 8c for Type 6.

#### Infra Solves the Problem

INFRA Insulation. Type 6, is an impermeable vapor barrier, it weighs but 1½ oz. per sq. ft. With so little thermal capacity there is practically no exchange of heat for condensation to take place. The construction—4 inner rows of reflective air cells of slight conduction, between 3 radiantheat-repelling aluminum sheets of only 3% emissivity, effectively prevents contact of condensation-forming temperature extremes.

Infra, which cannot form, absorb nor store appreciable moisture, has 97% efficiency in rejecting radiant heat, which represents 65% to 80% of heat flow thru wall spaces. It is also singularly effective in blocking conduction and convection heat transfer.

# Condensation SEVERE PROBLEM

"Condensation...severe problem in the tightly built, well-insulated, high humidity homes of today...The meeting place of warm and cold is moved inside the house, usually somewhere in the outer layer of the insulation or between the insulation and the sheathing. The vapor then collects inside the attic or the walls and the result is plenty of trouble.

"Wet spots on the ceiling or walls, as the moisture flows down from the cold attic space; falling plaster as an end result; constant and repeated paint failures on the outer walls and gable ends; and rotting rafters, joists, studs, sheathing, and shingles or siding; these are only too common and costly results of the over-insulated, under-moisture-proofed home.

The easiest solution, of course, is the inclusion of a good vapor barrier when the house is built... A series of laboratory tests made by the Forest Products Laboratory and the University of Wisconsin in 1947... Aluminum foil had by far the best rating as a vapor barrier."

From "Weather-Conditioning of Roofs for Residences" by Groff Conklin, "Progressive Architecture," Nov. 1949,

#### THERMAL FACTORS, INFRA TYPE 6

Down-Heat C.044, R 22.72 = 7½" dry reckwoel
Up-Heat C.08, R 12.50 = 4" dry reckwoel
Wall-Heat C.073, R 13.69 = 4½" dry reckwoel

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# Don't get caught with



There was a building dealer,
Whose name was Sam'l Brown.
His business was progressive
And a credit to the town.



2. But Sam was such a cautious bird,
He worried day and night
About his inventory—
And was he buying right?



5. And when the spring came 'round again,
With building on the boom,
Sam placed some mighty orders,
Cause he had a lot of room.



6. But sad to tell, the rush was on;
The factories couldn't ship
As much as Sam'l needed—
And his sales began to slip.

#### ASPHALT ROOFING INDUSTRY BUREAU

SPONSORED BY 26 LEADING MANUFACTURERS OF ASPIRALT SHINGLES, SIDINGS, ROLL AND BUILT-UP ROOFINGS

# your Stocks Down!



3. "It might be had," Sam figured,
"To build my stocks up high,
Until I see what others do—
And how soon people buy."



4. So Sam went through the winter months

A-buying hand to mouth.

While all the goods he might have had

Were shipped to "Somewhere, South."



7. Sam lost a lot of profit,

Which of course he would have not,

If he had just remembered:

"You can't sell what you ain't got!"

Don't risk getting caught with Don't risk getting caught with your stocks down. Past experience tells us that manufacturers cannot make prompt Spring deliverles against a peak load of deferred orders. Your contractors and building customers must depend upon your asphalt shingle inventory to meet their schedules for Spring. The stocks you take in now will insure their goodwill and your future profits.

2 West 45th St. New York 19

# Take it from these SUCCESSFUL HOME BUILDERS!

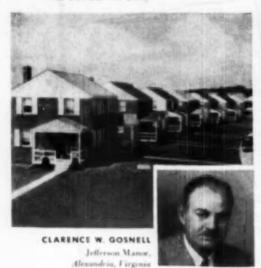
All of these prominent builders have chosen Kelvinator products for their projects. They selected Kelvinator for reasons based on years of experience. They mention especially the user-acceptance of Kelvinator products, their dependable performance, and their low maintenance costs over long years. For full information, please write to Department D., Kelvinator Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.



Sun Ranch Homes, New York and New Jersey

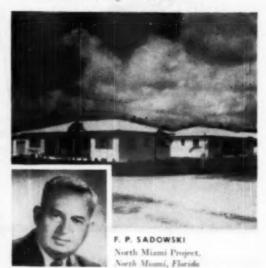


WALTER G. STACKLER & LEONARD FRANK Frank Homes, Long Island, N. Y.



Relvinator featured enclusively, notion-wide, in the Good American Homes Program





Be sure to visit Kelvinetor Exhibit Booth No. | NAHR Convention, Stavens Hotel, Chicago

#### What About Conventions?

WHAT do conventions have to offer, and what can the member who attends take home with him that he can translate into tangible results in his own business? What they have to offer depends on the program content of the general sessions, and on the number, variety and informative value of the exhibits.

The quality of the program can be anything the members want it to be, because every convention head not only accepts but continually solicits suggestions from the members. Only the members are to blame if the program is not to their liking. Excepting conventions in the few cities that do not have adequate exhibit space, the effectiveness of exhibits is determined entirely by manufacturers of the products on view. The results they obtain from year to year are sufficient to spur them to strive to maintain or achieve high educational and interest value. Thus, conventions have to offer principally what the association members want them to offer.

What a member can take from them that has practical value depends entirely on how he uses his time at the convention. Conviviality and play are pleasant if not important by-products, but the real purpose of a convention is to make the time and money spent by the member who attends an investment in improved business operation.

Good examples of what members can get are afforded by the experiences of a Boston home builder and an Illinois retail lumberman last year. The builder, faced with a problem in the development of a system for circulating warm air heat, collected a group of advertisements clipped principally from the American Builder and flew to Chicago with the idea of thus taking one day out of his busy schedule, to attend one session of the panel on heating and have a quick look at the exhibits of the advertisers whose presentations he had brought with him. The proposed one day at the convention became three, spent exclusively with manufacturers of beating equipment and other building products, and resulted in a complete solution of the heating problem. A plus was in the form of several new ideas he had not thought of.

The lumber dealer listened to one speech at a dealer's convention, then left for home immediately to revise his spring purchasing schedule. The move netted the dealer excellent profits in the spring months, whereas with the plan he had charted before attending the convention he would have had to struggle to break even.

Conventions are what the association members want them to be. The values are what each individual takes the time to look for and to find.

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## NAHB 1950 Convention on Exhibition

HAH B 19 4 9 Exhibiting

### A NEW MILEPOST

### In Home Building Accomplishment

Annual MAHB convention is now firmly established as the official event for measuring the industry's past achievements and for planning future progress

PLANS are almost complete for the 1950 program of the yearly NAHB convention, a five-day builders' exchange which promises to surpass all previous meetings both in value to the individual and the industry. Discussion panels, a comprehensive new products display, advice on color, lighting, selling—the latest information on mortgage financing, house design, land planning—a thorough report on how to use climate to best advantage in designing houses—a record-sized exposition of materials and equipment—and a series of outstanding speakers—are some of the highlights.

Dates this year are Sunday, Feb. 19 through Thursday, Feb. 23. Preliminary meetings start Feb. 16, with NAHB committees meeting Feb. 17 and the board of directors Feb. 18.

Judging from heavy advance registration, attendance at the Convention will break former records, with more than 16,000 persons expected. Exposition space was sold out almost immediately after applications were opened. Facilities of both the Stevens and Congress hotels will be used.

The display of products and materials opens Sunday afternoon, Feb. 19. An entirely new feature is being added to the exposition this year with the aid of Joe Schulte, technical director for Kaiser-Burns Homes of Los Angeles, This will be a section devoted exclusively to new products.

There will be a round of activities for delegates starting from the moment of arrival. The big Sunday feature will be the gala ceremony opening the Stevens and Congress exhibits. Several thousand people are expected for this event. The display of building products and materials will be the most lavish ever presented, containing more than 600 products used in building homes.

By using facilities of two hotels, the number of exhibit spaces this year has been increased to a record-breaking 252. The number of exhibitors will exceed 160, also a new record. There will also be more diversification of products than heretofore, with about 35 exhibitors in the show for the first time.

Exhibitors come from nearly half of the 48 states. They will send over 1,800 key personnel to Chicago to show, demonstrate and explain their products and consult with huilders.

The special section reserved exclusively for new and revolutionary products will be one of the exposition highlights. Located in the Casino Room of the Congress Hotel, it will feature a diversified group of 20 to 25 new products which differ significantly in function, design or other basic characteristics from products now generally available. Although names of the products to be shown have not been released, it is known that they will include new type tools, structural items, heating systems, plumbing specialties, lighting and equipment, and operating conveniences for home equipment.

On Monday morning women builders will present one of the most colorful sessions of the convention. The program, under the chairmanship of Mrs. Henny Mollgaard, well-known Milwaukee builder, will be a virtual "must" for men builders. It will feature modern wallpaper and its use in today's house; proper lighting for homes and gardens; the best house designs for families with children, and the proper use of color—inside and out—for fast-selling houses. A highlight of this program will be the presentation of the prize-winning woman architectural student in the house-design contest sponsored jointly by the American Builder and the women builders of NAHE.

The first general session Monday afternoon, featuring many of NAHB's leaders, will set the keynote for the convention. Former President Robert P. Gerholz will preside. Reports will be made by association officers with President Rodney M. Lockwood, Convention Chairman E. M. Spiegel, Secretary Nicholas Molnar and Executive Vice President Frank W. Cortright sharing the stage. Association business will be followed by an "onstage" press conference with NAHB past presidents, and an address by Dr. Ruth Alexander, nationally-known newspaper woman.

Popular "shop-talk" clinics will be held again this year with nine discussion clinics and round tables—five on Tuesday morning and four on Wednesday. These important working sessions will feature FHA, VA and FNMA questions and answers; the newest innovations in heating systems; a session on local opposition to public housing; rental hiusing questions; office accounting; tax problems and savings; custom built homes; problems of the small builder; and time and material accounting.

An entirely new convention feature will be staged Tuesday morning—a session devoted to actual demonstrations of new ideas in building. Plans call for the construction of jigs and forms on-stage with actual construction of parts of a house with time-saving techniouses.

The general economic outlook and the outlook for mortgage finance will be discussed by several experts in the Tuesday afternoon session. James C. Downs, real estate analyst of Chicago, who has built up a national reputation for his appraisal of the future building situation will lead off with "What's Ahead for Home Building." He will be followed by the "Big Three" of government housing affairs-HHFA Administrator Raymond M. Foley, FHA Commissioner Franklin Richards and VA Loan Chief T. B. King.

Mortgage Finance Chairman Thomas P. Coogan will lead a discussion panel on the mortgage finance outlook with leading authorities participating. This panel is generally believed to be one of the most valuable single features of the carter convention.

Problems of land planning for builders come up for discussion. Tuesday evening when the popular land planning pariel is presented. David D. Bohannon, NAHR past president and chairman of the land planning committee, will moderate this session.

Another valuable meeting on development problems will be the seminar on Wednesday presented by the Community Builders Council of the Urban Land Institute. In this session, the leading authorities on good development will analyze site plans brought to the seminar and will offer their expert advice on problems involved. This is a meeting for the Council members, but is open to anyone wanting to join at the regular fee.

A session on good design and merchandising is slated for the Wednesday afternoon program, The design panel will present a discussion of design trends and the best use of the newest ideas, with slides to demonstrate the points. This will be followed by a merchandising forum under the leadership of William P. Atkinson, NAHB second vice president, in which selling experts will tell how to meet the market. One of the featured speakers will be Fritz Burns of Los Angeles, recognized as one of NAHB's leading authorities on sales techniques.

The annual banquet will be held Wednesday night with Edward R. Carr, NAHB past president, an chairman. Emphasis at the banquet will be on relaxation and entertainment.

The humorous quiz program, "Dr. Hi-Cue," which tests the knowledge of home builders about their own business, will be presented again Thursday morning by its originator, Joe Haverstick, Dayton, Ohio. This "curtain raiser" proved very popular when it was introduced last year.

"Dr. Hi-Cue" will be followed by a study of the effect of climate on house design, featuring Dr. Kenneth McFarland of Topeka, Kas. Dr. McFarland is rated as one of the nation's outstanding authorities on this subject.

The climate study, "Doubling your Sales by Harnessing Climate," will be presented by House Beautiful magazine under the direction of Elizabeth Gordon, editor. The study is considered an important scientific contribution to home building and was conducted over a period of many months. The Thursday presentation will sever such subjects as the use of knowledge of climate in site selection and site development, and the

for addition to the special section at the Congress Hotel, an unassably large number of new and toproved products will be shown by exhibitors in the regular sections of the exposition. A survey among exhibitors indicates that over & per cent of the exposition will be devoted to products which are either entirely new, very recently improved, or automally available for the first time.

Advance internation indicates that manufacturers will show products designed to lower building costs in greater numbers than here-tofore. There will be a variety of new products designed especially for small, low-cost houses.

Most exhibitors will have experts on hand to make on-the-spot analyses of working plans and to submit installation and design ideas.

In the third floor corridor of the Stevens, three additional exhibits of exceptional interest will be shown: the prize winning entries in the house-design contest for women, aponsored jointly by the American Builder and the NAHB's women's division; The Southwest Research Institute exhibit devoted to the Revere Quality House; and the national prise winners and

other top entries from NAHB's latest Neighburhood Development Contest.

A well-rounded program of entertainment has been arranged. Tours and events have been scheduled for women visitors and a constant round of attractions is available to all delegates including tours of Chicago's housing projects. A grand rally will open the general sessions and the popular delegates' and exhibitors' dance will be held Monday night. The banquet is one of the outstanding social events.

#### CONVENTION HIGHLIGHTS

Sunday, Feb. 19

1:00 F.M. Especifico Grand Opening Congress Hotel 2:00 F.M. Especifico Grand Opening

landers, Fab. 28

18:00 A.M. Woman's Program for Home Builders

Winner Weman's Jeophine Meys
Architectural Contact
Macine Livingstree
on
Heura Review Seatrice Wei

The Lightelier Co. Lighting for Homes and Gordens 1:36 P.M. Sneed Belly 2:86 P.M. Find General Session Fresentation of MAHS Officer Color Feature," (MAHS AT WOSK\*

Color Fasture: "HAMS AT WORK"
Address: "Which Way America?"—
Dr. Buth Alexander
On-Stage Free Conference

annelses, Park. 23

16:00 A.M. First Clinic Series
Office Accounting for Tax Problems and
the Arcrage Balldor Serings
Custom Ballit Houses Problems of Small

Time and Material Accounting
2:80 F.M. Second General Senten
"What" About for Home Britishing?
James C. Boves
First Baltroom Famil
"Butter Mortgage Finance"
Famil Members

Moderator Thomas P. Coops 8:80 P.M. Second Bollroom Fasel "What's Blow in Lond Planning?" Moderator:

Wednesday, Feb. 23

19:89 A.M. Demonstration Session New Techniques for Buildans 16:89 A.M. Second Ciloic Series Questions and As-Bolders Hasting Sy PHA—WAR-PRIMA FORMATION Houses United Houses Automation Published Automation Local Published Automation Published Automation

2:80 F.M. Third General Session:
"Yoday and Tomorrow's House Besign:
Moderator: John Highland
"Salling Temorrow's Homes
W.F. (Bill) Aftiness
"Here's How W.F. (Bill)

6:40 F.M. Annual Banquet Entertainment by Saldin Con

THURSDAY Fob. 23

9-30 A.M. Fourth General Sealon Dr. Hi-Cus-Joneph B. Hersenfich Demossitration: "Doubling Your Sales by Harnassing Climets"—Elizabeth Gordon Address: Dr. Kanseth McFarland Convention Clusing by Haw President 250 F.M. Impection Tour of Chicago Pleasing

# Building Products On Review

COINCIDING with presentation at the 1950 NAHB Convention and Exposition Feb. 19-21 of what is probably the greatest and most diversified display of new and improved building and related products ever assembled, the American Huilder in the pages that follow illustrates and gives a brief description of more than 400 products, representative of the items being produced by manufacturers in the field.

Manufacturing has finally reached the peak peacetime capacity which was foreshadowed by the exceptional production of war materials; and there has been no time in history when product-research has been so intensive. Benefiting directly—in terms of improved construction techniques and cost-cutting—is the building industry.

In listing this large variety of equipment and materials, the American Builder feels that it is furnishing a feature which is of definite reference value to builders and dealers, a preview of the products which will be on the market during the year. It has, of course, been impossible to present more than one or two products of any one manufacturer, and the descriptions

Presented in this issue is our annual "Exposition in Print" — pictures and descriptions of more than 400 of the latest products used in construction

are necessarily brief, including only the salient features of each item. To facilitate inquiry for supplementary information, all products have been assigned key numbers which may be used in conjunction with the coupon on page 152.

A large number of the products listed on these pages will be on exhibition at the NAHB meeting, where delegates will see many of them for the first time. In some cases manufacturers are rushing completion of new items in order that they will be ready in time for the convention. Surprise showings, without any previous announcement, are scheduled by several exhibitors.

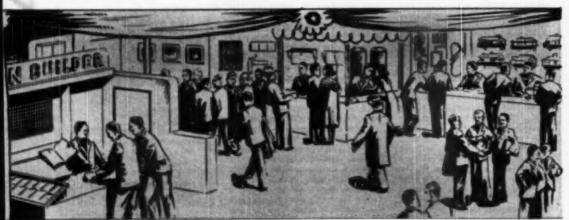
A few of the products which will be demonstrated at the builders show are mentioned below as examples of the show's diversity. (Most of these are included in the American Builder's presentation): A rod-type concrete form tie with spreader, which is said to cut the cost of building forms by more than half.

Concrete forms made of magnesium, reported to last longer, go up faster and to be more accurate than lumber and plywood forms.

An improved type of aluminum siding. Application will be made under duplication of actual construction conditions, including such phases of home erection as installing window flashing and box corners.

A variety of equipment innovations by manufacturers of heating equipment, including a new oil or gas furnace designed especially for radiant perimeter heating, several units for small homes and basementless houses which are said to increase heating efficiency and to cut fuel consumption.

A hardboard paneling that has the appearance of Spanish leather and hardboard panels surfaced with laminated plastic in attractive colors.



American Builder, February 1950.

#### OTHER PRODUCTS ON DISPLAY

Editor's Note: Because some predocts to be displayed during the 1950 KAHS Convention and Exposition did not reach American Builder in time for the February dendline, these preducts do not appear under their hotel designations. Instead, they are featured elsewhere in our New Products presentation.

A simplified standard for erecting small glass block panels in residential construction, and glass blocks in a new 12inch size.

A new tri-well sink.

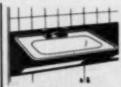
A factory-made garage door on which many designs or patterns can be incorporated at the time of installation and changed later, if desired.

Improvements in prefabricated chimneys, resulting in lighter weights and lower installation costs, including a new low-cost unit for use with gas heating exclusively.

In today's competitive market when costs must be cut to a minimum in order to provide the soundest values possible in houses of all price ranges, a thorough knowledge of the latest developments in materials and equipment is even more essential to builders than ever before. The American Builder has long recognized the wide interest in this phase of the industry and will continue to announce new developments in its regular New Products section as soon as information on them is available.



American Builder, February 1950.



ABSRETI-Flat rim to-setrer, model 1, 2013-5. Alliance/Ware, Inc., Alliance, Otto, For Installation with linelearn or tile. Farmed trem id geoge sameling steel. Use with any standard fascar on 4-inch contest. Surfacos are percetain on steel, stalianced, Ledges accommedate tailed articles. Size: 21 s 17 inches. 8000715 301, 304.



ASSISSED—Steel gerage dear. Alexanson Products Corp., Position, Metch. Built in one priore with all others points, clothed for astro-strength. Steel sheets are ster-transcally plutted with size to pre-vent roll. Also gives prime coul at Seriery, Eggisped with believed, everyland springs, beary built bearing rollers. ScOINt 131.



ABINGTH--American Bross Co., 28 broadway, New York G. N.T. Ecolo Model Insuso Restinent compare tybing for plumbing and cadean hasting, copper teaders and genture, and copper chimeaey and window Rashings. Demosshbotto coo of Associanda Tippo M copper Tables, cast ferance colidar tips delineap filtings. B/OOTRS 161, 164.

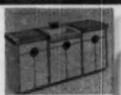
#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABBRO3-America' Winfite cast lock. American Cabinet Hardwar (Copy. Bockford, III. Bergend to provide security for home. Seal window safe for dewing upper and lover cash fegarbar with according to the control of the control of the control of the control of the seal of the seal of the seal of the control of



ABJUIDITÉ - American (Itý, lach partplus sischtle care. American Rine lverfacting Machine Ce., Tolaste I Obie. Will cut a 25 janch plank e 65 deg. or will make a straight cut of 3 inches. Balanced for seahand operation. Balanced for seanature and care blade time in opper centur and care blade time in coper parties. All the motions is partied to parties. 24 M.P. motion. 800/211/163



AEMMING-Greation fevalury and cabinol. American Radiator end Standard Sanitary Corp., Pittoburgi 10, Po. A compact Sevalury for combination with dreaming telpion. The Dressiyn bas a deep lovel wide profesions against Pittings or turnished in non-termishing Chrismand. BOOTHS 58, 54, 58, 58

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



AE76805—Procut insulating fire brick for combustion chembers. Armstrong Cork Co., Laucaster, Pa. He special knewledge or skill required to assemble combustion chembers for home heating plents. Brick are pre-cut in three sizes to correspond to common oil burner units in use. Beforctorie can be cut with rasp. 8003195 27, 28.



AERG027—should 31 Overdour. Barber-Colmen Co., Rockford, Ill. The hardware of this 6-actions 100-up type door is beary 14 quege steel. Weight of door is held by fleelbis steel singlane cables rouning on bell-boaring charves and rolllent. Lacks outsmark.cdfs in closed position. Steck size: 8J feat. 8J Olyth 187, 184.



AESSIDS—Someroon formed ofter levatory (8-21%-16-C). Briggs felt, Co., Plumbling Ware Bir., Detroil 11, Mitch. Sheingrand levatory is revitable in shy birs, one green, and irony colors of very dight addition to price of white. Designed to provide attaction desire with accessing, Similar object to revour chine. BOOTES (88.18). 18

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



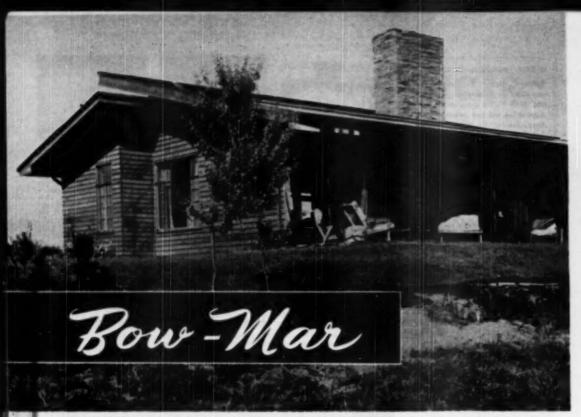
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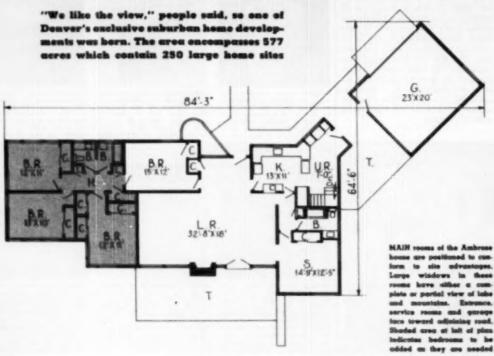
ASTRUM-ASI-Weather conditioner, model 578. Byselt Heater Div., ABSI-Inde Sies Squipment, Inc., 17695 St. Cleir Are., Cleveland 10, Oblin. Festures controlled lumidity for semmer operation by "releast" cycle. Low-deep input 50, 600 8.T.M. High-shape input 50, 100 8.T.M. Shipped assembled in two sections. BCOCTHS 108. 109



A \$750000 - Bondandate inscripted cidling. Philip Carry Milip Co., Clincinnati 15, Ohin. Simulating weedgrained shinging. Bendandate in made of ly-inch weather light insiting power. Respires no paining; neally intralled own old wartherboard, shutco, or shinging. Arealiable in four cotons. Size 453cc/35, inches. BOOSIst sta.



LARGE windows in the Ambrone bosse are designed to capture a view of lake directly in the torspround and mountains beyond





ROM the observation of a beautiful site came the idea of an exclusive home subdivision. Lloyd J. King, a resident of Denver, Colo., acquired a tract of land overlooking Marston Lake near Denver, with Bowes Lake directly to the south. On this site he erected a home in 1942. The many

obvious advantages the site offered attracted motorists driving along the nearby highway, who stopped to enjoy the view of the mountain range reflected in the lake at this point. It was then that King began to realize the potentialities of the area as a high grade home project. He pur-

chased the S77 acres of lake and surrounding land and placed its development in the capable hands of Ambrose and Sons, realtors of Denver. Site planners were Harmon, McCrary and O'Donnell, landscape architects. They proceeded to lay out the entire 392 acres of usable area in one acre or larger plots, bearing in mind the excellent view at their disposal and arranging the individual sites ac-



ASSISSO — Coloins both type rook would blankel. Cathine Curp., Chicago I, IB. An improved paper and time lands to be a considered product in blankels. Vaper barrier in improved to reside report transmission. Forth encoding paper in craped in both directions, giving it at two way stretch of 15-26 per cast. Three-faid finance, BOOTH 6.

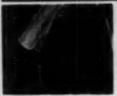


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apport. 18 per cost cine for differensolid drawniph. The standard gradies
we mayb from an 261-3mb vire.
Con be seen of BOOTH'S 18, 19, 188.



ABBRITH-Figs Bit bertvestel home constant cooler. Cheluse Fan and Blower Co. Inc., CBB Brown Fr., tr-kepten II, New Jorsey. Bell-driven wal type parkage for unit comes complete with fan, mater, parkenalis certified wall derline, mounting chains need prings, and convex breat. Size than 18 to 60 Inches. On display at 8007H 186.

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



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ASSISSION—Super Fire oil burner. Altrimage Diric, Chrysler Corp., Buyton, Ohio. Rumanent mendel altriminer care brousing bedde all burner parts. Large erus feel shallow, presence requisiting and cof-oil valve lotogral parts of pulse until Mondate. J-101., J-102., J-103. J-104. December 1998. December 1998.



ABIRDON-Gas-fired forced oir for nace, Middel 828. Colomes Callanc, Wichhi, Kan. Unit has serjed of 16,800 8.1.U. per leave, air the Urway rate. 150 colds foad per midste of 35 lockes water garage Compactify sigled, occupies 54 square feat. Plusis is tan basic enamel. Direct drive eliminate serious seals. SIGCIPS 66.42. 49

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ASSIGNS—RamChief Hi-Boy count-offlow furnace. Conce Engineering Works, Mendots, III. A soil sepa-cially designed for use with under-floor ductio in reachings beamens has beenes. May be fired at full raffing with alther all or gas. Compact self messoures 21 x 21 x 57 inches. Barked at 83,780 S.T.U. par hour at bonnet. BOOTH 118.



ARBIBIT - Tallar made chimney vitro-fine type "E" flue, Condemotion Engineering Carp, 122 S. Michigan Are, Chicago, III. A vitreaux cameded metal chimney camputete with flue beasing and road flucting. Sections are assembled on job. Plant temported by calling and road roading floor speas. Made in 4, 7, and 8-ind flueneers. BCOTH 184.



ABZECTO —Created Stylint garage door. Created Steer Co., 41-88

15. Jean, Burbart 7, Bilds. This door is constructed with a partented the colors core. Any desired design cat be applied to the Start serface with the use of stack modifing Jamo design can be repeated or been front door and shorter front door and shorter in them. Identification.

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



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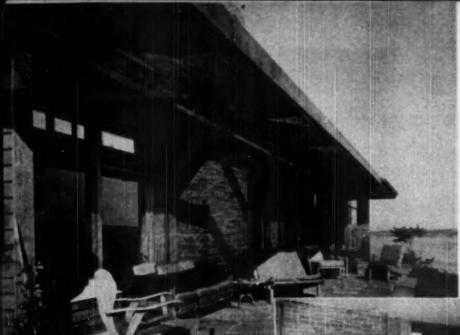


AB3999-Delco-Haar Condification of feed foreact, Medial OVC-RL. Delco-Appliance Div., General Min-ton Corp., Rochester 1, N.Y. A two dege reporting oil burner sings of special olloy metal. This model designed for restricted space. Sincer only connected for foreact from the NAME SECTION OF THE SECTION OF T



ARIBITIS—Funedra packaged basement window. Delvoit Sheel Freduct Co. 1915 Gelfills 9), Delvoit 11, Mich. Fackage includes window, fully placed, screen and storm self-insert with across and clips for installing. Not rolled steel camenat socions. May complete double contact for weathering. Top opening in ceast. 80:07191 32 37.

cordingly. Curvilinear drives patterned after early bison trails wind in and out in relation to the site's contours, with the lake and mountain al-

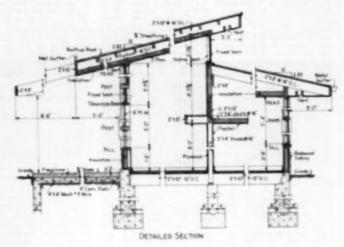


LEFT: Open flaquious terrore entereds excess the entire lathe front of living room. Exposed roof beams above are covered with rottes during the entire year. Gloss in large fixed such to V-duck-thick plate. Below: Portiol view of living room looking toward terrare. Interior and extenter the flaquious and extenter and extenter the flaquious and chimney

common; and some lots can boast of 360 degree views. The project is laid out on the theory that city people want city conveniences, but still like the advantages of country living with its wide open areas.

Situated in a section where up to this time only large ranch-type estates had been built, the Bow-Mar development naturally suggests a western or functional type of architecture. The project will eventually consist of 250 homes, a business district including all needed commodities, a public school, a community church





Left: Sectional drawing showing position of clerestory windows



SIDE view of house indicating memoer is which designer has taken advantage of redling oits. Corner window at grade occum in all-corners ream at lawer level

and a stable large enough to house all the horses belonging to Bow-Mar residents.

Twenty-one homes have now been completed which were built at an average cost of \$25,000 each, with an additional number under construction and many more now in the planning stage. Opportunities for home ownership have not been offered to all comers at Bow-Mar; it is handled on a more personal hasis. . friend bringing friend... with the ultimate idea of forming a congenial community of residents of comparable means and tastes.

The two houses illustrated are representative of the style of architecture embodied in most of the houses located at Bow-Mar. Other types embrace the conventional ranch house typical of this area.

The Paul D. Ambrose and the Gerald D. Plue houses conform to the functional type. In reference to style Ambrose said, "Our principal purpose in building this way was to command a view to the south, overlooking Bowles Lake, and also to build a house which we believe is very functional. Most of our living is done in the living room which is the major portion of the house. It was built



VIEW in large living-dining room toward treat extremes and kitchen. Combination of planter and plywood are used on walls



ABBBIT -- Space server levelong. (Blar Co., Ford City, Fa. This issutory ver especially designed to the la pewder noems and small "downstoin" levaturies. It is made of ultranss china and, therefore, will not carrede. The surface it impervious to dains and the offsets of ordinary acids. Available is of the designer. BOOTHS 48, 42, 48.



AEIBON - Robber Hs. Framuel Robber Ca., Framuel, Ohio. His robber Cia., Framuel, Ohio. His robber His is made in to eventue factor and the second sec



ABISMO--Disposal varies feed unit. General Electric Co., Bridgepant, Com. This model PAS-III is derigored for inclafation to close quarters. Requires only 7 lockes bufferen control line of wall drain and sink buffers. Operatine or affiliar source or affilia

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABISSIT—General flush door. General Physical Carp., Loriville, 19, (A) Three-piv coordivation. (B) Light opening installation. (C) Holize-care flush door construction. (D) Salid-care flush door of an interior construction. (E) Flush door of an interior construction. (E) Flush door of an interior construction. (E) Flush door of an interior construction.



A\$28896-Worls King Pulmorater Given Mrig. Co., Les Augelles, California Plus echemicit garbage dispose requires 8 incline classronce from bortion of all nis to soil receive settles Designed or coefficies food out: pulmorator can be fed with again arting. Plus most deschie-besed pink without seed to leaver warfs like Democatorated in BOCITES 61. 82



ASSESSY -- Numition automoticistines dryer. Humilton Mity, Cei Twe Elvers, Wile. An ultra-violalessy and consoler and pir purific bill becturie and provide "twe still stream on provide "twe still stream on the provide "twe stream of the provide and stream steering has been as the provide and report of the provide and the provided report of the provided and the provided and provided the provided and the provided and the provided the provided and the provided

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ASSIGN—P and H Economy House Harvischfager Corp., Part Wask logtes, Wis. This preliabricate house, measuring 3M28 feet, is can structured with six different slave from, and stress different floo plans. All parts of well passes on bonded is waterprouded glywood which serves as sofetior shealthing listons blacking assais. BOOSH III.



ASSISTO—Hitt Tarmitle Central Systems, blemplate 3, Tann, uses this termitor 'cardle' to democates to each destruction. This organization offers production application offers of fongus (wat or dry), beatine, decay, and fermilles, Lamber is treated of time of construction to deviroy wood detrouring organisms. Unit displayed at SOCH1 1.



ASSISTED—Wall haster, model & WP-Serice I4. Healty Sife, Co., 85 S. Arroys Parkway, Pasadone E Calif. Bust vented circulating type health of time 6-lank total wall is opening 14 t 99/5 inches. Equipped with peniliva safety shat-off valve. Pasels, finished to baland enemal maintained at soft temperature. 45,889 8.1,10. capacity. BOOTH 161.

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABBOOM - Nydrotherm gap fined her mether beller, Medel No. 3-1/3-PMR. Heat and Ackerman, Inc., 18 E. Hist Sr. New York IF 8. Cast Iron beller regeller 88,588 8.1.0. Input and 800 opport first installed reddellow. Lev setter capacity (5 gals.) provides for quick regions to temperature changes.



ASTR/100-Mentary inosay, U.S.A. Notperint, Inc., 5600 W. Taylor St., Chicago, III. broom is felly assumedia, thermostofically controlled. Cabinat osciolosed model. Has automatic lesses, Si-Inch roll. Finish is of Coligious white exames. Low-priced to St family scenomy budget. Unit to be demonstrated SOCTH J.



A\$3005 - Fleatum opring tempered durintees state and visely plantic tage. Number Breegies Carp., 100 Broadway, New York 7, N.Y. Alaminum claft and tape of venetics brinds of same critics, many colors available. Buth tape and clots are completely vanishes. Durefued band between paint and delay and colors on completely vanishes. Durefued band between paint and defenders. Buth SDCRE 175.

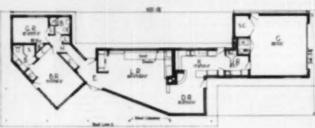


THE lake teast ownersh to the Gerald D. Plus house is a good exemple of functional design with large place group and covered terrace



DETAIL view showing covered terrace

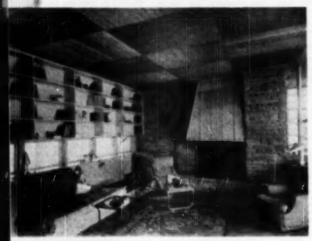
Houses at Bow-Mar are of functional design, with large glass areas to capture view of the mountains



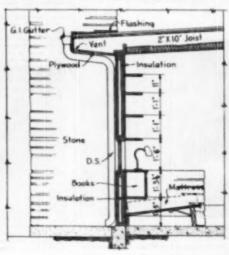
OPEN plenaing is featured in this house. Living, dining room and kitchen are in reality one large area. Doors are non-existent between rooms except in the bedroom area

large because we wanted to make it a combination living and dining room, and, if necessary, a playroom. We had large windows placed on the south wall to take advantage of the Colorado sun, which shines 365 days of the year."

With reference to functional design, Ambrose states, "Instead of building an exterior house and fitting the rooms into the shell, we did just the opposite and built the exterior shell around the rooms we actually wanted to use as living area. I believe that the Plues had approximately the same purpose in building their house. A greater amount of glass area is used and thus their home comes closer to being a sun house than ours. Only two rooms in their house do not have the heat of the sun during winter days. Both houses were built on the theory that much of our living would be outside; consequently our terraces



COPPER-HOODED Breplace at end of living room



American Builder, February 1950.

are large and protected. We find that this idea has worked out very satisfactorily and that our terraces can be used from six to seven months of

the year."

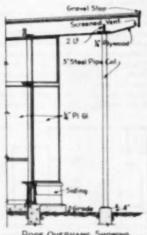
Both of these houses are placed on a hill top with a tremendous sweep of plains and mountains below. The Ambrose home built by Bellams and Williams, contractors, at a cost of \$30,000, is compactly suited to the present with provision for future expansion. The architects of both houses, Smith, Hegner and Moore of Denver, have indicated in the plan a thoroughness of study in the proportioning of the existing units to the future extension. The two terraces, one for living, the other for dining, are sheltered against the winter weather. A sunbreak of rattan over the main terrace prevents glare on the living room windows and at the same time permits full radiation of winter sun and circulation of summer breezes. The clerestory window in the north wall of the living room provides light to that portion of the room and full circulation of air in summer.

The Plue house, built by Sam Mc-Morrine, contractor, at a cost of \$25,-000, has many of the characteristics of its neighbor, except for the fact that the glass expanse is greater and the plan is of the open type. Flat roof has wide projecting overhangs that act as sun shades for all windows and form a shelter for terrace on

south wall.

Stained cedar siding on frame walls were used in the construction of both the Plue and Ambrose houses.

DETAIL drawing shows below and at left indicate the construction of front and retar walls of living room including the section with the built-in seat and cupbourds



ROOF OVERHAMS SHOWING PIPE COLUMN SUPPORTS







#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



Park Ava., St. Louis





#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



BOOTHS ISL ISS. IS



Model No. 2. Majestic Co. Ington, Ind. This is a double



#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS





gravity formace No. 111.





VARIATION of colors, motoriels and real lines ever assesses been flavoured much homes from having management back

### Mass Production—Individual Results

Homes in 200-unit development are built to standard pattern but plan is variable to let buyers pick details they like best

DUILDER Joseph Raymond of Hawthorne, N.J., has found a middle ground between building houses for sale and doing custom work. The buyer of a home in Raymond's 200-dwelling development can say "This is the way we wanted it" instead of "It doesn't quite suit us, but we had to take it because that's the way the builder did it."

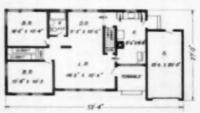
Raymond achieves this without sacrificing the economy of building houses to conform to a standard pattern. His pattern is flexible, however. Although he does not build to the customer's specifications, in almost every possible instance he does give the buyer a number of possibilities from which to choose. What Raymond calls a "variable room" is an excellent example. This can be either a dining room, connecting with the living room and the kitchen through open archways, or a walled-off bedroom. The buyer decides which he prefers and Raymond builds it that way. No matter which, the price stays the same.

This policy pays off. Forty-six houses were sold the day the first model home opened. Since then, sales at the Raymond Ranch Homes project, located at New Milford, N.J., within commuting distance of New York City, have been consistently far ahead of construction. Only 91 dwellings were planned when the development was opened in October, 1949, but because of the ease with which the homes sold, Raymond soon decided to expand the project if he could obtain more land. He succeed-

ed. The first 91 houses were planned for a 29-acre site, but within a month after selling started Raymond had bought an adjoining 29 acres and increased the number of homes to 200.

The variable room-dining room or bedroom-is not the only item about which the buyer has a choice. The customer may select from exterior color schemes created by Beatrice West of the Rahr Color Clinic. He has a choice of a garage or no garage. If he wants a garage, he may decide whether he wants a small front gable peak over the garage or over a bedroom at the other end of the house. The customer selects his own wallpaper, although the builder buys it and puts it on. The customer decides whether he wants ceramic tile or aluminum tile in the bathroom and he selects the color of tile he likes best. He chooses the color for bathroom fixtures. He decides between double-glazed or ordinary glass in the picture windows. He selects from among 14 possible colors for the breakfast nook set in the kitchen. He selects the color and pattern for kitchen linoleum. He decides whether





\$12.500 model house is highest-priced dwelling offered at Raymond runch homes. Optional exterior features include garage, stose work around picture window and wood skingle siding. Plan shows location of kitchen to provide view of both front and rear of house



he wants double-coursed red cedar shingles on the sidewalls or a combination of wood shingles and ashestos siding. He decides whether he wants stone veneer around the front picture window. He selects the style of lighting fixtures. Some of these choices do not change the over-all price of the house, and some do. With one basic floor plan, FHA-approved prices range from \$10,500 to \$12,500. The exact price of any particular house depends upon the exact choices the buyer makes.

There are two model homes—one with a \$12,500 price tag and one at \$10,500—so that prospective buyers can see all the features which make price variations. To enable buyers to inspect both variations of the variable room, one model has two bedrooms and a dining room and the other has three bedrooms and no dining room.

Raymond gives special credit to color for the rate at which his houses have been selling. Referring to the exterior color planning, he says customers "appreciate the advantages of

| 60 cm 5 cm 40 cm 4 |  |                              |
|--|--|------------------------------|
|  |  | No. 10.004<br>Albert Service |
| Person   |  | MI Star                      |
|  |  |                              |
|  |  |                              |
| -  |  | -                            |

COLOR chart supplied to builder has samples of actual motorials in exact colors being used. Charts are valuable sales old



ABBBI 17—Earlingson refrigerence. Neah-Earlingson Comp. 1889 Finments Sci., (servoir 2), Mich. Moddi 3, sight cubic feet cut has fullwidth breen teed cheef, bentieffly control bellin, and bric difficus criquers. Fromm foud cheef where up to 10 St. of packaged foods. Insuitated hells: "perfu" regulated to trees.



ABIBIT IO-Grounded phop-in drip, Type CFD-G. Notificat Blackris, Products Corp., Chaodeur of Cammarca Bidg., Wittborgh 19, Pa-Pop-in strips provides callisis at pitter six or 18-land intervals. Third dot, in addition to two tinto is and receptable, has copper insert monited to the subli-satisf's shed base to affect growed. BOOTH 8.



ASSISSIT — Medientifuld disurs. New Castle Products, New Castle, for. Accordion-footing cleaners with explaint fraction for any colors to themdone side in many colors to themdone sides based on preparier deer and colling beights. Can be used single or decide. Fairful to weekahis, saley to clean, Sones room permitted to committee to Colors State and State Committee. SOUTHER State and State Committee.

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABSSITI--Burall pluminum tencion corono. New York Willia Claff & 66 Bark Ann, Haw York II, M. Y Tancion design eliminates sid-trames. Attached with thumb screw and feesion calch on bettern her Basility entiathead for window seals log, installed from inside house Rainforced multi-strand edges for correspond elements. 8 CO 111 135



ASISO 10 — Fuetheroptide varietobe hardware. Needahl Co., 180 W. Alameda Arre, Berbank, Calif. For old installations or new, this bardware is designed to minimize bination of merping by masse of a balanced overhead sugarendon principle and concasted better guide. Extraded aluminom deable track provided for cellent, BOOTH 178.

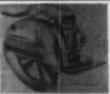


ASSECTO—No-Well bunding pluse. No-Well band, Co., 123 M. Em.
3. Millowable 2, Will. Bandrows or walls, benefit fight to care day well. A con-cast testing finish, distals all requiser plants finish, bands permanently to crecke chipped or painted walls, given the plants of the plants of the plants. The plants of the plants.

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABSISTS—Fibergies accordical file. Oweno-Corning Hibergies Corn-Tolede I, Olice A lightweight perforated according title of compressed according title of comles. High second-absorbing properties. Beselfeet thermal insulation value. Wolght: J/19 pound peropurar feet. Can be camented on machanically mounted. BOOTH 19



ASSISTS—6-inch Guild Saw. Porter-Cobis Mischine Co., Spractuse 8, N.T. Model A-8 saw weight only 19½, The. Mealmane despit of cut: 2½, Inches. Curbine San hamps dust off line of work aboad at all times. For general construction work, heavy duty cross-coffling and ripping. Also uses abresive cutting wheats, Sainbitz BOOTHS 28, 36.



ABIDICIA—Blo-Fan elactric calling vastilister. Pryse and Co., Inc., Schonen, Coll. Mas Specifice speed control. Cambrines fan and blooms functions. Easily reserved for cleaning. Market fully endosed, rubbits mounted, radio interference-proof. Unit this fasts with Enhanced calling or wall. Available in these sies with Speed captrat. BOOTH 151.

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABIND IS - R.O. W. reservable wand vandews. R.O. W. Sales Co., Ferndale III, blick. Windows operate by means of spring cushion, removed by preming sask to last to right olds comes from. Pressured from spring quids halds sask in place. Screws of clim adjoint amount of pressure. Windows removable for washion. RCCP374 III.

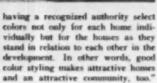


AESIBIG -- Multiples radial-area saw, shedel 20-A. Delta ship, Dir., Millenukse I., Wis. Fowered with 15 H.F. maher with 4 or hinch saw. Cub fall ca-pacity, right or self hand, at any ongin. Bull bearing stides. Cell-brosted eye level scales. All controls in treat of machine. Surractable blade guards.



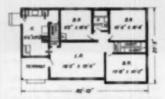
ABBB134—Pulla Relacrooms Relacrooms Co., Palla, Sensa, Floquer french noths convening and down file window shads. Bliminates potting up, sating down, palling, storing, repositing unreass. Glucrosteed terpers. Refectedes can be instelled on any type of window. These screens admit 28 per card more flight than offer types. SIOOTH SI.





The Rahr Color Clinic did not participate in the original planning of Raymond Ranch Homes. In fact, when the firm was retained late in October, about ten contracts already had been signed, and it was necessary for Raymond and his sales staff to ask these ten buyers to approve the color schemes worked out for their homes. All except two buyers were enthusiastic immediately, and it didn't take long to convince the dissenters that they, too, would benefit by the color consultants' experience and knowledge.

Nine exterior color schemes were developed for the Raymond Ranch \$10.500 model is lowest-priced home. Asbastos siding is used on and wells and rear, wood shingles on front, Plan shows how disting room converts to badroom



Homes. As delivered to the builder, each scheme shows real samples of materials in every possible case—a real sample of an asphalt shingle in the selected color blend, a real sample of shake shingle stained to the hue desired and a real sample of asbestos siding in its color. Paint colors for vertical board siding, trim, accent and the porch also are shown exactly. Color locations and color specifications are given.

Each color scheme is prepared in chart form, bound, in a neat folder. The sales staff at Raymond Ranch Homes considers these folders one of its most valuable selling aids. A prospective customer is not told, for example, that the house he's interested in will have a red asphalt roof. Instead, he is handed the appropriate color chart, which not only informs him that the roof will be a red blend but actually shows him the material itself. As Miss West puts it: "He can hold his roof in his hands."

In developing each of the nine color schemes for the Raymond houses, Miss West began by choosing a blended color asphalt roofing. This is her customary way of working. For the Raymond Ranch Homes, there are five asphalt shingle blends—red, gray, slate, brown and green, with each except green in two different schemes.

Besides creating the different color schemes, the color clinic decided exactly which of the 200 dwellings would be colored in accordance with each scheme. Decisions are final. If a customer buys the house in location No. 87, for instance, he must take the color scheme designated for No. 87. If the customers wants another scheme, he must select a location for which his chosen color plan was specified.

Raymond is convinced that altering his professionally planned color design would detract from the appear-American Builder, February 1950.



COLOR consultant Beatrice West of Rake Color Clinic shows painter exact hus. Miss West will speak at HAHB Feb. convention



DINING room is optional: buyer may choose bedroom in its place. Regardless of choice, price of bosse is some. Mrs. Reymond. the builder's wife, decorated model home interior



BUILDER Raymond shows allding doors

ance of the development. This is what he told one buyer who wanted to make a change:

"I put the color on your house partly for the benefit of the people next block. And I put the color on their houses partly for your benefit, too. We don't want to have only a collection of houses which might be good-looking in themselves but which wouldn't fit well together. We want to have a good-looking community—your house and all the other houses, the whole thing together!"

The buyer, Raymond says, thought a moment and said, "You're right."

Buyers can make an additional color selection by choosing different siding materials. In one color scheme, the color consultants specified harn red wood shingles or a combination of barn red shingles and gray asbestos siding. If the buyer wants barn red, he can order wood shingles on all exterior walls. If he wants barn red on the front and gray on the ends and rear, he can order the siding mate-

#### BRAND NAME PRODUCTS USED:

AWNING PARMET PROPOSETS USES: EQUIFMENT CO., INC., beforeom fighters
AMERICAN ADIATIOE & STANDARD
MFG, CO.; lincisum, ABMSTELONG
CORK CO.; lincisum, ABMSTELONG
AFFILIANCES, INC., COMMANDER upaud-acting gurage door, bitches reoffloher, FASCO INDUSTRIES CORF., paint
MATTIN, SECONDARY COMP., paint
MATTIN, SECONDARY CORF., canpa,
DORG-WARNISE CORF., canpa,
DORG-WARNISE CORF., Tamper,
Glass, LIBERY-OWENS-FORD GLASS
CO., Transportum Bitches cabinats, BUILLINS MANUFACTURING CO. Yeongatown did. MULLINS MANUFACTURING
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rials which will give him those colors.

"Color has become an exciting experience for me," Raymond says. "In the three developments I built before Raymond Ranch Homes, I selected the outside colors myself and thought I did a good job. But I have to admit (Continued on page 286)

American Builder, February 1950.



A&BBIT7--Mayel Jan-Flore beating cold. Boyat Heathers, Sci., 1931 Washinster Ave., Albamburs, Calif. Unit is onclosed in Mascentre cabinat which can be painted or perpend to blead with any type decor. 46,898 8.1.0. Impet unit accupies space 10% s 27% inches. Also made in 38,600, 85,000 and 58,000 8.7.0. Three other sizes. BOOTH 57.



ABBRIDE—Tine-On Miningles, Ruber and Co., 387 Nt. Michigan Ave., Chicago, Mt. Each shingle, in edition to being factored to road dech at four points with conceasal mails in further secured by being tocked at four points to the adjustent chicagine with integral intersect chicagine with integral intersection, September 1842 requires no wires or cline. 800TH 6.



ABSB129—Busus grims winders. F.
C. Bussell Co., 188 Classer Are,
Cleveland I, Chin. Prime window
code of Armore bet-disped gainsclead their and Recitable With behaline exidence obminism examed. Requires no furtilizer painting. Tolkelar
countraction for strength. Griss in
beddied in modific. Optional selfstoring panels. BOOTH 388.

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABBB237 — Protective tecques for hardware. Surgest and Co., New Hares 9, Com., Above, two idenlical knows from Sargest production. One at left, with regular coning after 17 hours salf-spray. One of right, profested by new facques, offer 183 hours salf-spray. Once on, new lacques is imparvisous to standard solvents. BOOTH 183.



ABTO 10-Long backed for took placement. Schlage Leck Co., the 1334, San Francisco. Call. Beckes permits placing lack of distance from time does edge for me with large soutcheans. Simple method of installation requires no special tools. Added links thus, seven or ten inches long, provide additional speca for placement. SOOTH 127.



AB300131—Bofnigeroter, Mindel Bitarrot, Inc., Brasserlia Bi, Ind. Geoparaind, client refrigerator, misurgactured in six slow, renging from 3.9 to 6.9 could feet front capacity BN-680A, A.1 cubic feet, is show shown. Equipped with frozon for stronge space, automatic temporal furz. coemists and other deficient features. BOOTH's 18th, 121, 122, 1

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ARRO132 — Membrane for waterproofing ground level concrete side. Sizel-traff Co., 28 W. Warker Drive, Chicage 6, 101. This blooker is especialty needs for application over sub-fill before preving soncrule. Can be mode to fit each size of floor area. Other standard width rolls up to 1915, feet are evollable. BOOTH 192.



A836113—Gos firos bot water bolior, Model 11W-189. A. O. Smith
Corp. Milrowkes I, Wis. A bearer
doxigned for homes of four to seror rooms, for all types of het voter heating including radiant panof boaring, Maximum logut 116,889
S.L.U. Over-oil beight: 89 incline.
18-inch diameter. Advantatic controois, mediciter burses. BOOTIS 18.



ASTRILLA Glide-Away parage decisioning Products and Mitty. Ce.
28 & Forest, Outriel, Mich. Mittheway Committee of the Committee. Cellino Controllino. Cellino parallel, self-inching door local rest responsis to Groups. 8 00701 (8)

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



A \$380 IS—Steel stiding closel doors. Steelcraft Stilg. Co., Rosmoves, Olhio. A packaged soil considing at two flesh-type steel doors, operated on ball bearings, within a steel door frame. Skipped, ready tor installation. Doors may be perchased separately. Have baked on prime seel. All waided, notice free steel contraction. BOOTM SI.



A8380136--Kitchen-Aira ventilator. Stewart Milg. Co., 1988-11 & Weekington St., Indicesperiii I, Indi. Aerodynamic impelier mechanism force ali out of hitchen. Requires cir-inch hale near range for indefforium. Operated by wall owitch. Matter is continued on resources mounts, Unit made of potished aluminum, one-cervorium 80/0714 M.



ASR01D-Magnesium well forms, Symmes Claring and Miles. Co., GMP Diversors Ave., Chilogop 19, 161. Weight of game is less than three months per square feet. Does not swoll when well, contract when dry. Will not rout. Faciling is 2/16-linch 21 magnesium alloy welded to racfangular frame with cross-pieces 12 inches. C. C. 80-OD19 12 inches. C. C. 80-OD19 12

With the thought that conventional procedures needed revamping, a Detroit subcontractor started training his men for faster production. He found that—

# Power Tools and Teamwork Speed Rough Framing



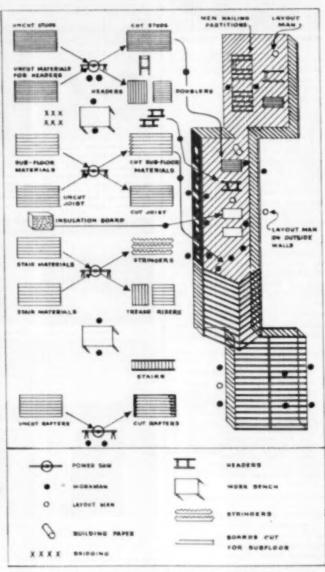
TWO men with this radial saw are able to cut 130 ratiors. I cuts each, in one hour



UNCUT material is piled on side of saw away from building. This is No. 2 saw



NO. 3 sew in use on operiment project. Radial sews are by J. D. Walloce & Co.



DRAWING of Sulak's rough framing system shows flow of material through power sows to building. Uncut material conveniently placed with four lest of space between stacks

American Builder, February 1950.



WILLIAM A. SULAK

WITH a battery of radial saws, a well-planned materials handling procedure, and a specialized work crew, a Detroit carpenter subcontractor is adding speed to rough framing. His well-tested system, used in construction of 175 apartment units in a 10-month period last year, is several times faster than the conventional procedure he used previously.

The subcontractor, William Sulak, of the Sulak Contracting Co., does not claim to be a time-andmotion expert, but says his system relies heavily on "men being at the right place at the right time."

His crew of about 35 men, plus their equipment necessary for rough framing, constitutes a mobile unit. They can be shifted to any job suitable to their organization, and proceed with the precision and speed of a well-trained football team. Each man on the "team" has a particular job for which he is trained. Sulak sublets the roughframing crew to a builder doing the kind of work where his methods are adaptable, usually to multiple unit frame construction. And important to the efficiency of his crew is that he can keep a team of workers together after he has trained them by keeping them steadily employed.

Speed in the system is developed by eliminating lost motion. Uncut materials arriving on the project (see drawing) are placed in relation to radial saws so that movement of any piece is always toward the building under construction. Lumber is stacked in piles generally with four feet of space between them, on the side of the saws away from the building. Material is placed on saw conveyers, fed into the saw; and finished pieces are stacked at the other side of the saw toward the building. From this point, carriers, usually one man for each radial saw, carry the finished material to a carpenter at the build-

ABROIN-Three-way sint combination. Ther Carp., Chicago St. Applicans ach as dishwater, clathes washer, and sint. Change of this convert dishwater to cistles washer. Dishwater capactry: service for six. Tabso eightpood clathes lead for washing. Arrafed, soc-apiash feeror serve woders and bowt. BOOTH 7.



ABBIG IB — Tript-Girig freming archors. Finites Engineering Co., Woohington, D. C. These archors eliminate need for teenalling. Used for joint anchorage, fyling down reflers and treased reflers, to realist placefor cracking around raugh opening, and for special real francing. Supplied with special real francing. Supplied with special reals and drawings. 80:07195 St. IS.



A SIGNI IV—Witches Agen will benfor Timben Siliant Automatis, Dir. Timton Defreit Aris Ce., Archann Arica. Counter-high cabined, finish ad in white and hopped by their tess steel work surface, contain timus-heating beiler, isstantenesses water beating specials had already water beating specials had already actionatic contests. BOOTINS 56, 19

#### BUILDING PRODUCTS ON REVIEW—AT THE STEVENS



ABSSITH-Washbrowed Tvis.Till United States Gypsum Co., 188 W. Adams 31., Chicago a, III. Iwin Tillo has new speed-cliech joint provides odges expecially designed for speedy, economical application with antenatic stapler. Eatre wide floogs convenient for natifing also Has pleatic-nated Hi-Liha water repollant Gaids. 8, 00711 138



ABBOITO-Fire resistant UEP partition poses. United States Fiyanad Corp. 68 W. 46th Sr. New York 18, N. Y. Cors of pases is of incomboothist issuiciting material. Sizes range from 18,18 to 34:144 lockes. Easily bracked and domounted. Blockness 15, sockes. Hardwood vaneet faces. Light is weight. 80/07/55 181, 181.



AB20/40—Virtumus china levalury, Model 622. Universal-Rundin Capitaw Capita, Pa. Spacians Indian of thina levalury hold tellad peapharenia. Towast bare of each are convenient bethroom ch. Chrome-break Stirlings of this all are available on matching planning faturess. Bimilar onits equivalent cash-ino. 800/1015-113. Its

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



A\$20141—Upon finating ferbene-Upon Co., Lenkport, N.V. Fautaners, placed 12 inches O.C. on stude, are nailed to tree places. Upon Strong-Bill full-wall penel is permanently applied to wall of new house by forcing penel opains there propage of ferbenes, which penetrate panel from rear, with block and bermany. BOO'14 168. More and bermany.



ASDSBT-Peckaged chimney. Van-Pacher Corp., Floid Bidg., Chicage I, III. Indire chimney chipped complete in convenient 3-ft sections including beas support, noof housing, flashing, rain cap, and cament to leatell. FMA excepted. Approved for see with all feels. Pits one or two sharies. Acid-preed tila listina. BOOTHS 548. 489



ABS0001—Drainters steel wall \$85. Whom Tile Corp., Washington, Rd. Tiles stamped from \$8 george clothe less steel capable of eitheranding considerable above. Furnished in three finishes: satis pitals, mill geliched pitals, cells unbecomed flasy to install over putty-libe maotic on new or old walls. Water and oursing-opport. BOOTIOS 189, 198

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABX0030—Bi-possing stoue floor Virginia Mestal Productor Corp., Orenge, Ve Supplied completes ready to install, with prime cool isotalization requires ball-floor to her Feather truch control tilide passing deers on hall bearing roll etc. Rubber bumper contines a diser jambs, 1, 4, 5, 4-6ast among the feather time.

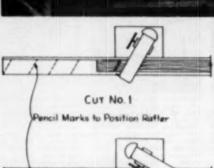


A \$20011 i -- Ware aluminum intercediate arening type utodow. Ware Lobercatrice, Inc., 178 N.W. 200 Sr., Milami, Pla. Beelgered sepectal type for low, ranch-type beauses. He 108 degree vantilatur opening which permits occess to solvida glas orne for closening. Permits vestilo tion in inclement weether. Comes in stondard sizes. SOOPH 8



A \$36000 - Webster besobined fronting design. Webster and Ce., Camden, N.J. Panelner rise above shows capper flored having element and special hange which supports motel facebased and encirouse. Spenge robber seat of end. By, Inches in halight. Mountling and keepboard enclosure are maked for increased chrough. SOOTH 69.





BRIDGING, procut, is made ready for an aembly to joints with notic in place. Subflooring in procut



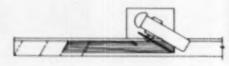
One man it positioned at the saw; the other at the lumber pile. The man at the saw makes the ridge angle cut-off at the top of the rafter as the first operation. He then swings the machine to the right until it is in the correct plate-angle position, located by an automatic stop.

Both men then pick up the rafter and walk to the left with it, where the man who was formerly at the saw now positions the rafter on the saw table at various pencil marks that have been made for the successive cuts. The second man at the saw finishes making the cuts, using automatic stops on the saw to quickly position for the angles.

While the man who aligned the rafter to the pencil marks removes the completed rafter from the table, the man at the saw goes back to the lumber pile and picks up a piece of lumber for the next cut.

While these saws are at work, at least two other operations in the building are underway, depending upon stages of construction. Work usually is concentrated at one end of the building so that a layout man and two assistants will not lose time. Position of men in the American Builder, February 1950.

CUT No. 2



CUT No.3



Cut No. 4



CUT No. 5

CUTS 2. 4 and 5 are made by man who was not at saw for first cut. Angles for these cuts are quickly located by automatic stops positioned on the saw. This sawes time and stops for men, who with this system. In Bulak's crew.







building, and the work they are doing, is coordinated closely with the progress of the radial saws. When outside walls are all cut, and assembly begins, these saws are cutting inside partition members. Plumbing openings and plaster grounds are all provided for so that when the framing crew leaves they do not have to go back to rough these in.

To add to speed and precision, this subcontractor uses power tools "wherever there's a place for them." Since work for his crew is confined to rough framing, power hand saws are used as well as the radial saws.



PRECUT subflooring is carried from the radial saw by one man on it is needed American Builder, February 1950



ABSSITE 4—Front-free automatic de trout rehriganzier, ADA St. Wastingbeuse Electric Carp., 26 E. Fisserii St., Massifield, Olico. A 9.4 coloifeat cambinațion refrigenore-frees or with fully automatic rapid delirapotom. Also sopiopod vilit Wool legiscos Sterilara, mael besper befue heaper, and hos benidrawes. 800/THS 103, 198, 188.



ASSISSE—Washed secretaren No.

Sia, Waufwood hittp, Co., 1488 S.
Evargreen Ann., Los Angolns IS,
Colif. An excelcionen 15/5 inches in
dispender that can be used with encyficational facilities of the Westfork
line. Cost from breas or brease in
fisibles of dull breas, polithed
breen, dull brease, polithed observed dull brease, and dull chemes. BOOL 118 154, 187.



ASSISTA—Wolfunder humas, Wullander Fervedt Homes, 178 Taisems Bidg, Taisems, Wash. Frieses are produced in three mediatr threehedroom well, small two-bedroom will, and forge tro-hedroom cell. Humas are availables either with or without garage. Earliers sales ofling at 822° West Berleigh St., Milliosaides 13, Wis. 800 (Hz 88).

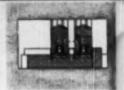
#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



A38055--Gilde-All elding doors wooded todustries, loc., 1909 Oubton 31., Skelle, III. Sliding door made of temperad Pradirocal complate with roller assembles and trucks, for wardrobes, closets, encothesh, four-to-calling design eliminates traming and plastering and increases usable sharpes tooks theedel on display of 500TH 191.



ASIMINO-Intradits type Worksover. Vals and Towns Mile, Co., Philadelphic IS, Ps. Bischric fork truck has power forced. Will IND and time palled loads up to 4,880 pounds. Houry bar-deal from members, evolgaed with tendem foad wheels. Cen be segripped with the platform and remets held coeted. Shart four redios. 90-07111 (3). Shart four redios. 90-07111 (3).



ASISSITY — Dure-load combinants metal usefunethy and such his ante. Zagars Inc., 889 S. Chica Are, Chicago If, M. Shawe abordiants section detail, using plat forms with metal perting step, If inch asts. Jembs are self-self or served with metal, allerinating pall struck vinders. Channel membe determined the served with metal, allerinating pall struck vinders. Channel membe also homes nections. DOCTH

#### BUILDING PRODUCTS ON REVIEW-AT THE STEVENS



ABDOMN--Insules glass block No. IBJ. Americas Structural Products IBJ. Americas Structural Products Go., Toledo I, Oldic. A prilamatic glass block designed for buildings in frequent-height-configlic localties. Baccommanded for otheris, other buildings with large gloss rauss facing bright on exposures. Similar in oppearance to feedback block No. Bil. 800711 168.



ABISSION — Gyramatic automatic waiter Madel G-311. Bandlo Norma Appliances, nor., You'rk Sand Ib, Norma Appliances, nor., You'rk Sand Ib, Norma Kipitip in planning (sounday with Northistando-action automatic waiter. Byran-Sorge cylimder, Sumble Action, but increased cheating action 18 per cent. Has water certing control to cotton waiter. BOOTH 15.



ABJ0000 -- Kritser redicat book brand, Kritser Bedisat Cells, hotel Chicago, III. Simptifiliad iostalization takes only three chaps. Cells, its ten feet sections, are of 2 s tilplich significant files benedict to two Jinch caeher, copper supply foliation. Cells filed in beneding clips, prismating these air circulation. Models of the soil shows in \$200701 188.

#### BUILDING PRODUCTS ON REVIEW-AT THE CONGRESS



ASSB278—Themaster plantic fits.
A-1 Plantic Mediders, our, MSS Divarue Plave, Chicago 16, III. Has deap returns, laid earlier over roughor walls. Convegated back doubles edibates unface and makes the differ. Blust adgas for buttles and its arold overelopping, (millions onlors, covad base title, out covers. Has deep returns. BCOTH IS.



AERSISSIA-Tapon binne Feel, Abron Products Co., Santillo, Olino. A peel accapted by PHA. Suppart with device for minor adjustments of bean. This device is covered with concerns when their is covered with concerns whose their peed power and peel of the peed of the peel o

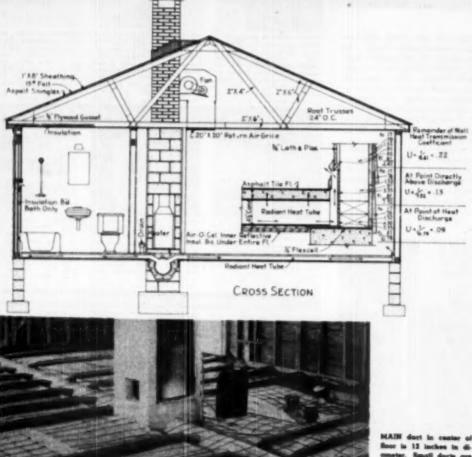


ABINEED—ANWELD maket oliding closed door solts. The American Weiding & Massafacturing Co. Warram, Olidin, Savings in specia increased occessibility to close contents, plus savings in Intiffact can circuition costs are described as adrentages of these described as adrentages of these described as adrentages of these described as adtention of the control of the control

## Warm Air Distribution System Provides



\$785, and monthly pay ments. \$48.15. Price in cluded extensity washer and life 125-feet lot, which



Spor is 12 inches in di-emeter. Small ducts are 3 inches. Concrete slab Soor is 415 inches thick

#### Even Heat

A builder-heating engineer successfully incorporates results of his research into a low-cost home venture

EATING has been of particular concern for several years to a home builder in Gary, Ind. Combingers of experience in industrial heating engineering with ten years of residential construction work, Paul E. Schleicher has devoted a sizable amount of his time to experimental work with heat. Today he believes he is using one of the most efficient methods he has worked with, so far, for hasementless houses.

Schleicher is using an adaptation of a radiant-forced warm air perimeter system with a continuous baseboard beat outlet devised by himself. The baseboard outlet, about three inches above floor level, runs around the entire inside perimeter of the house. Heat is supplied to it through a duct heat distribution system, also devised by Schleicher (patent is applied for).

Warm air from an oil-fired counterflow furnace is forced by fan into a duct. 12 inches in diameter, that runs through the center of a reinforced 4½-inch concrete slab. The heating system is located in the center of the floor, over the large duct. From this duct, warm air passes into 3-inch diameter pipes imbedded in the slab about two fest on centers. The heat then passes through the baseboard outlet into the rooms.

To form the continuous baseboard beat outlet, Schleicher leaves a space of approximately 1½ inches between the concrete slab and the inside face of the studs. A reflective type of insulation is fastened to the studs from the bottom edge of the slab to a height of seven inches. One 1¼-inch wood block is fastened to each stud at the level of the finished floor, and one for each stud is fastened at a height of about three inches above the floor.



AEROSSI--Redient glass hasting system. Continental Badiant Gloss Heating Carpy, 1 E. Sish St., New York 16, M. Y. Heating by electricity pending Newugh aluminum clamant fused in glass tempered for thermal shock. Gloss of low condectivity see at discrete by water when but, Zone Control for varying non temperatures. BOOTH 32.



ASSESSION — Physical subflooring. Designs Fir Physical Assectation, Taccase 2, Weah. This ly-lock physion are properly resolutions. The panels must all structural requirements: carry 188 pounds per opours feet, cellers leed, with 1/380-inch deflection for joints 18 inches on center. SOOPH 34.



ASSESSING—Washwind cacego, Ander help, Dir., Fall: Diamping and Welding Co., 1988 Front Iz., Caysheap Falls, Olleis, Aluminosis doorway campoy finished in behalf oralised with choice of grain, red, or blue road and white tries. Shipped ED, Diamonisms 48 inches wide, 32 suches doop, 13 inches high. Canceptes made in ris sylvan. B/DCR11. 1

#### BUILDING PRODUCTS ON REVIEW-AT THE CONGRESS



ABINDLY Fermica deceretive plos tic leavinate. Permice fessionis Co., 4816 Sepring Geree, Cincle cast 32, Otto. Laminate, Uf-li-not flick, is venecred to plywood is make the countertop leaviny as combby. Walnoothing and passelin around but are Fermice Bearly board, 5/82-lints filtet and held is place by H-yape shrips, BOOTH 31 office by H-yape shrips, BOOTH 31



ASSISTS—Gates red type controls form its. Gates and Sons, test., 80 S. Salagogo, Desree \* \*L. Coor. Dans factory-mode tire, also act as aprenders within the form. A amonth steal rod is inserted through fongs of tie on exclude of term to had in place. When farms are romoved, wire is not flush with concrete. On felentary at 8000781 13.



ASTAMIT Flow the setter, \$24.3 Products Cu., Ballanitte, III. Missis Fird cotton cuts cort, septent, who here plantic, flow tile, and the laum easily and accurately cut ongles up to \$5 degrees. Accommodate sizes up to \$1217 teams Over-all magnatism conditional Weights IV prevents. Upper blantens that the prevents of the prevents of

#### BUILDING PRODUCTS ON REVIEW-AT THE CONGRESS



ABBSSY -- Lace-Lefch permanent magaint lefth. Laboratory Equipment Copy, 59, Joseph, Mirck. A lafich without moving ports or springs that is trouble from. Works If down are warped, Latchine down from bair gently. Uffilias continuous energy of permanent magaint. Concides at magaint, opecial deel plate, and screws. BOOTH II.



ABBRITI--Blue Ridge Lournes pertura gless. Ulabos-Owens-Ford Glass Co., Yoleebo 3, Ohio. Pattern consists of parellel beveled surface one inch wide resembling formers. For interlear and exterior gissing, partitions, transame. Satinal Binds Twenty officer patterns available in this transforcest glass. 16.4 per cash



ASSETT - Auto-Lot oluminum dening window. Lediman Corp. 80. Box 661, Malem, File. Entroded abminum sections. Weather-decipated hardcoxelity and vertically. Fernished with removeble inside crosses. Lottle systematically, Belayed action-bettem roal operatfiest Provides ventilation in reins weather Co. 4 Suprise at BOOTH 18.

#### BUILDING PRODUCTS ON REVIEW-AT THE CONGRESS



ABSSIT4 -- Masseite Penetwood, product of Masseite Corp., Chicago 2, (III), covers walk and self-mp of this playmore. This is a Misseite hardboard penel engineered for all types of wallboard indulinties. Similar to Standard Presidence of the Artifician of the Misseite Corp. (In the Corp.) and drampts. Have above with V-joints of term. Incl. Inform. IEO/OT/9 1, term. Incl. Inform.



ASSSt 19 -- Proposed Gold Sond Bock Wood, National Sygnem Co., Sulfato 2, N.Y. This rock wool in raterion is now available in enclosed batts and seated bleshafe. Both have breather covers on three cides, to bold rock word in place, and vaper barrier to prevent passage of mainters. Her uniform density of mainters. Her uniform density

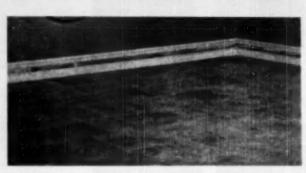


ABSIDITI - One-bar window frame. Das-line Window Sales Co., Inc., 1349 Ristol Ava., Nr. (Similangham R. Alia. Frames aliminate need for floridad wood frame, plays, oil and nealiney-leades and cat. Steel One-Dar window frame olidan lots of the Communication and that frames platfore serve. Non. Unit comes benderland with

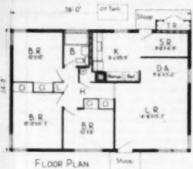




TYPICAL home in Schleicher development has sliding doors on all cleases, on out side storage gree in back, on shown obove



HEAT entering room between two baseboard sections, in evenly distributed



FLOOR plan of model home, left above

The blocks above the floor level serve as a plaster ground and as support for the upper portion of the baseboard outlet (see drawing), while the blocks at the floor level serve as support for the lower portion of the baseboard. Warm air enters the rooms by leaving the ends of tubes in the slab, striking against the reflective insulation, and passing between the baseboard sections. The heat distribution system,

which provides an even temperature throughout the house, has received both Underwriters' and FHA approval.

Efficiency of the method depends largely on adequate insulation. In Gary, where the firm, Paul E. Schleicher & Sons, Inc., completed and sold almost a hundred homes incorporating the system last year, the subgrade is sand. If the soil is of any other type, at least six inches of sand is recommended for the subgrade. A reinforced type of insulation is placed under the entire slab. Two feet under the outside edge of the slab, 1½-inch thick rigid type insulation is used. This insulation, between the slab and the foundation wall, is laid so that one edge is flush against ½-inch insulating sheathing used on the outside walls. Attics are insulated



STREET scone of Schloicher houses in Gury. Rulters are secured at ridge by Timber Engineering Co. rings



FOLDING door experates living room from bedroom. Next finish of clasets represents quality workmanship stressed by this firm

with four inches of blown mineral

In homes completed last year, the firm successfully used an oil-fired heating unit and flue encased in a brick chimney. In this system, a fan installed in the attic takes heat collected from the flue and fire pot in the chimney and forces it down into the duct distribution system. Cold air returns to a register located under the fan at ceiling level, and is blown back over the wide heating surface of the flue and furnace.

After thoroughly testing the efficiency of the heating system, and while their 89-home project was still in the planning stage, the Schleicher firm began to tell potential home buyers about it through advertising. Interested home-seekers could be shown several homes with contented owners where the heating system had already been incorporated. In some instances, temperature of the floor and room air varied as little as one degree. Shortly after the Schleicher 89-home project began in May, all the homes were sold; the size of the project increased, and the number of home sales for 1949 was over ninety.

Besides the beating system, other features attracted buyers. They liked the idea of a 3-bedroom home in the \$10,000 class with down payments of slightly over \$795, and monthly payments of about \$50. One of the bedrooms is separated from the living room by a Modernfold door, and if the third bedroom is not needed, ten feet can be added to the living room by merely opening the door. Fully landscaped lots, 50 to 63x125 feet, were included in the sales price. With popularity of his homes increasing, Schleicher in planning another 150 similar houses for 1950.



ABSSSSI—Aluminum rott-up Kitchonetre dose. Orchard Bratham, Inc., of Masdow Md, Butherford, N, J. Spece sover requires no oxing oras. Made of Intertroloting state and oporated by counterbelance spring rolles of top. Both up and down on olde ratio to any desired position on to floor level. In variety of colors: No sas, city BOOTHS 15:



A828053 — Revelvedor wardrobe. Revelvedor Corp., 4629 Arger S., Los Angelos IS, Calif. Closet buffl erwand revolving door. Additional stronge spece behind casher mirror door. Tee semicircular platforms mounted on door back. Selvide of close. Similar unil equipped as personal home but to coet six. Exhibit. 600/DTS. 14, 15.



A \$20000.b—Gundour spriny light. Invisellier Ch., Inc., 20 firving Plaza, New York 3, N.Y. Carlong Ne. 37 edisorbable occlear and MS-4 realiser garded. Universally adjustable society occurred in 14 gauge steet pictor of any light of the properties of other field of the second infra-based shaminsm. Percellent hybra mechanisms. Comes with 12-inch lead. Ballish BOOTH 35.

#### BUILDING PRODUCTS ON REVIEW-AT THE CONGRESS



ABBISH—Thermader Blacthic Binin range. Bermader Birchir Milg. Co., \$119 Bistrict Bird., Los Angeles 22, Csalff. Bischiri; coshing tops a clochtic own noith made separative to in serious designs utilitating chiqui coil, seedely, fill-ful-class heating calfs. Shipped ready for counting at any werk Savel. 80 2011 15.



ASSISSION—Automatic windows. Wile Automatic Windows, Inc., ISI Fark Ara., New York I?, N.Y. Double glassed picture window discritically operated affecthed to brince screen that moves into piece as gless disoppears into well. Windows can be chapped of any desired point for ventilation. 90/07951 37, 81



A PROTISO — Chympic wantifes, that one idetatorally, tex., Chymnis Wash. Namifes made of replaced participation for withorband batheromenium. Pastic commitmers, revicence, Namica Statut Statu

#### BUILDING PRODUCTS ON REVIEW-AT THE CONGRESS



ASS6007.-Varmiculite planter fireprending. Zanolitic Ca., 18 5. La Solte Sv. Chicago R. 18. Used for Freproeding Roars, roots, columns, beams, girders and fresses, with gypoum planter. Lightweight and Bin material prending on much as lear bears fire protection to structural members. Easy to appli-At the Cangress Shifting, BOOTH 4.



A\$150500 — Disappearing toddormodel No. 15. Minnesshe Wood Specialities, fer., 57. Paul Park, Minn. Low-cost model can be inribilled in any scuttle opening 18 inches voide or vider with a room height up to 1 feed 2 inches floor to floor. Simple conditriction requires mounting two encher blocks in actic floor not for instatisticis.



A\$35000 -- 6. Ventence pan rosis. Knape and Vogt killig. Co., Grand Rapids, Nichi. Ksape porte and associal of sight, out of vey. Designed to fir all birchen cuphorards. 6-Ventence is a chrome-plated finance further of sides of the composite of the committee of

#### BUILDING PRODUCTS ON REVIEW-AT THE CONGRESS



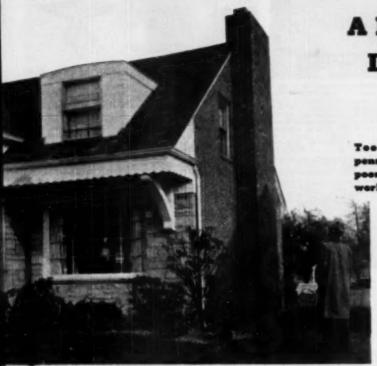
AB20221--Ball prime morer. Ball Alexant Corp., Box I, Buffels M. Y. A motorized wheelborrow, can carry 18 cabic feat in the chanically appeared dismpine buch of. Sideboords, shown in photograph above, are removable. Gepocity by weight in J. (88 pounds. Operates on tricycle principle.



A\$76820—Forma-Stone exterior wattenin. Farma-Stone Co., Columbos 11, Obio. A material and process for carting stonestite fecing directly on propared walls by use of patiented moulds. Appearance of external stone in testure and color. Laid in readow, brother, or coursed adder design. Basic material of



ASIRDITO-Win-Dor Jafousia hardware. Cosement Hardmare Co., Chicago 21, III. Integral hardware factury assembled soil with worther-dripped brackship for sight of word or glass. Natiliess and ratfle-yread sist relacelies. Concealed operator. All segonal parts are of son-formous materials. Can be used as inferior and saterials partitions.



## A Heating Man Looks at the Chimney

Too often inefficient and expensive heating is the result of poor chimney planning or poor workmanship with a good design

#### By Guy A. Voorhees

Technical Secretary, National Worm At Renting and Air Conditioning Association

the first place.

Of first consideration in the design of the chimney is the provision of an adequate flue area for the rapid removal of smoke and flue gas. The quantity of smoke and gases to be removed will depend on (a) the kind of fuel which will be burned in the furnace and (b) the quantity of fuel necessary to maintain the house at a confortable temperature.

It is the heating contractor's responsibility to determine the heating needs of the house in order to correctly size his heating plant installation. After having designed the heating plant and, through consultation with the home owner, determined the type of fuel to be used, the heating man can specify the required inside dimensions of the chimney flue... either from his own experience or from data supplied him by the manufacturers of the equipment which will be installed.

Flues built to serve furnaces which will use oil or gas burners will not require as large flue dimensions as will furnaces which burn coal. In areas where hand-fired coal may be burned, either now or later, chimney flues should be sized even larger than theoretically required in order to offset the effect of soot accumulation. Continual depositing of soot on flue walls will naturally restrict the area of free smoke passage. Dr. A. C. Willard, president emeritus of the University of Illinois and influential factor in the establishment of the continuous warm air heating research program sponsored by the National Warm Air

A MAJOR essential of good home building practice is the careful construction of a chimney which has been correctly designed to perform its intended function. This is the joint responsibility of the architect and builder—neither of whom would call himself a heating expert. Yet, if more chimneys were designed and built after consultation with the heating contractor, the number of home owner heating complaints would be materially lessened.

The fundamental purpose of a chimney is to remove from the house the products of combustion, smoke and flue gas, which have been generated in the heating units of the house. When built to serve a hand-fired coal or wood burning furnace, or one heated by a natural draft oil burner, the chinney should fulfill a second purpose; namely, to create enough draft to draw combustion air into the combustion space of the heater. Nothing either structural or decorative should be incorporated in the chimney which will prevent it from effectively and adequately serving these functions.

It is reasonable and logical that the beating contractor should serve as a consultant on chimney construction. The majority of house chimneys are built for the purpose of serving central-fired home heating systems. Because the comfortable heating of the house is his direct responsibility, the heating contractor should have a voice in every element of construction which will affect the final performance of the system which he installs.

When a home owner with a handfired coal furnace complains to his fuel dealer that the coal he is using "doesn't seem to have any heat in it or "doesn't burn properly" it is a prevailing practice, based on proved experience, to peg the chimney as the first suspect. Draft gauges and other chimney function-testing equipment are enjoying increased use among fuel dealers and heating men. These are proving more and more that poor chimneys are generally the cause of poor and inefficient fuel combustion. When the defects of faulty chinney flue construction have been proved to the new home owner, the general contractor can expect to find himself on the receiving end of vociferous complaints which have, in many cases, even led to legal action.

Chimney rebuilding is expensive. It is certainly many more times costly than it would have been to correctly design and closely supervise the proper construction of the chimney in Heating and Air Conditioning Association at this University, recommends that in an area where handfired bittsminous coal may be burned in a central heating plant, the noninal chimney flue dimensions should never he less than eight inches by 12 inches.

In addition to reducing the free area for smoke passage, soot accumulations in undersized chinney flues present definite fire bazards. Chinney fires originate at the hottom of chimneys when soot ignites. Burning rapidly and intensely, such a fire will generate such a high pressure inside the lower part of the chimney as to practically spout the burning clunks of soot out of the chimney and on to the surrounding roof area.

The height of the furnace flue is also an important design factor. This is particularly true when there is a need for "natural draft combustion" as in the case of a hand-fired furnace burning solid fuel. The chimney serving this type furnace must provide strong enough suction to draw air into the combustion space and up through the bed of ash and fuel.

If the heating system is designed for use with solid fuel burned in a stoker, the stoker fan will supply the forced draft pressure necessary to supply the needed combustion air and force it up through the fuel bed. The chimney need supply only the amount of draft necessary to remove the flue gases from the furnace.

An oil burner of the type operating on natural draft will require chimney suction strong enough to pull the air into the combustion space in order to support the burning of the fuel. The oil burner equipped with a forced draft fan will provide its own combustion air and the chimney draft need be only enough to vent products of combustion from the upper part of the combustion chamber to the outside.

Draft intensity of a chimney is dependent on (a) the difference between the temperature of flue gases inside the chimney and the temperature of the outdoor air and (b) the height of the chimney.

The greater the temperature difference between the flue gases and the outdoor air, the stronger the draft. That is why a chimney located somewhere near the center of the house where it is not exposed to winter chill until it rises above the roof will provide a stronger draft than an outside chimney which is exposed to the weather on one or more sides. Cold, dense flue gases collected within the flue confines of an exposed chimney, blanket the venting of the furnace and can result in tumes and smoke



ABISSIVE—Apus: Disk A bitatic Sint. Apus Bectrical lafty. Co., Claveland III, Oho. Interspectate selective last verbr heater within cott. Copacity: complete service for cis. Max high vericity cleaning scrion, record-oir drying, self-cleaning tab. Dimensions: @bSESM inches. Heavy duty more with safety switch.



ASSETTO-Strand conclused garage door. Delivel' Steal Products Co., 198 delfills In, Delivel' II, Millis, Schronneshed one-glora dreal deserkemplras Jinto bandrasen. Richter weetherbrig seets bestean when door is closed. For spenings 607 and 1607 feet, Stear is 1884 with heavy services. BOOTRS 23. 23.



ARBORTH--Gas range, Builder modal No. 1-dill, Nandwisk Stove Co. Claveland, Isan. Allik approved for cotural, manufactured and Ll gas. Disrepa space provided its over-shed bir with using door Sacrahes Mouselay. Coulder coulding top, japanned grates, drip bowls trap, japanned grates, drip bowls trap-door becoller with stiffing pan.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ABSB017—Greatures soil great wolfcorrecting, imperiel Paper and Color Corp., Glea Falls, M.T. Hossahold challes-greate, Iol., casely blots, ioditte, liquer delice-can be removed with seep and water or with classes in agents, including bleachas. All color particles and paper sealed with synthetic reals. In many colors.



ASSSSII — Universal Molito-Sus. Pann-Grag Mfg. Co., Milmespill, Mill. 11, Millin. In nine different designs, Dass with restrictal and fire with relacted opening. Whi metal chain Six one wall thickness from 50, Includes to 18 incless. Incides cabinet door in furnished in either birch on and. Buth hollows for half certificial.



AB780013—teclnor model 5-20 M bever, loc., Inclination Division Calv., III. A gas-fined househol inclination for use with spiffs (15 gas. Models have bushes of work Capacity: 12,980 B.T.V. with atmopheric, ribbon-flame type burnel Ash drawer under carl true grafts fi lindes think, Approved by ASIA

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASSB019 — Bantam bollar-burnar unit. Abdrich Contipany, Wyaming, III. Rabad at 100,000 8.7.U. parhour output. Overall dimensions: Ibalizet inches. 16 verifical fire trobes. Bentam is equipped with removable domastic had water coil to furnish three gallons per minuta. Writing, circulators, verbens, optimed.



ABINGER—Heritachtal tow-cost had water botter. Govey-Shapand Bollar Co., 1311 M. Capitot Aro., Indianapolic 2, Ind. Pirod inferthampolic by the Section of t



ABISSON - EitchenAld home disvasilier, model IS-18. Hobert Mitg. Co., Iroy, Ohio, Strigaged-devel model for undercounter installation Also evalishts in cabinet. Percalais enameted took with stalentes dreafittings. Revolving was one will six openings. Two class operations capacity; service for a to 8 people.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A\$356807-64CD pertable air compresser. DeVilbios Co., 300 Phillips Area, Toledo I; Ohio, Weighling 32 pounds, this compresser delivers 275; cable fast of air per minute at 12 pounds pressure. Furnishes uncesth flow of air ample to sproy without excessive thinning. Also for classifications finishes.



AFIRMS — Makerials bondling tooder, TL-W. Textemedrine Corp., Deerfield, Ill. Powered by Affic. Chalmers engine. Designed for light contraction and leading work. Secring wheats in near. Short over all length: 12 feet, 15 coldings of the Corp. In the Co



A \$186888 — Ywe-lech diaphrages pump, Re. \$5.AR. C. H. & S. Idanelocturing Co., \$869 berric Palmer St., Milrovatar SJ, Will. This self pumps \$869 quilions at 5 feed. 1/5, kp. air-cooled engine. Swingtype volves; shraight-files waterflow. Shaft airs name in celline bearing.



TO essure a circiple, amooth-jointed lining, each successive length of lining tile should be positioned first and the supporting brick work built around it. Too often this is not the prevailing practice. In most causes the brick work is built up first and then the lining is dropped into position inside. The inortisable result is fulface to get tight joints between tile sections and failure to properly fill apare between lining and brick wark

backing into the house.

From information supplied him by the manufacturers of the heating equipment to be installed, the heating contractor can advise the architect or builder as to the desirable height as well as the inside dimensions of the chimney flue.

The offset flue is probably one of the most prevalent structural faults in chimneys to which the problem of insufficient draft can be attributed. The necessity for creating offsets in keeping with design and structural demands of certain style houses is not to be denied. However, in a great many cases, chimney draft problems in offset flue chimneys could be eliminated by use of the simple ingredients of careful thought and skilled craftsmanship.

From the fractional standpoint, the furnace flue is certainly more important than the fireplace flue. Therefore, if the heater flue and fireplace flue are encased in the same chimney and if one of the flues needs to be offset, let it be the fireplace flue. Wherever possible the heater flue should be kept perfectly straight.

If offset of the heater flue is absolutely necessary, it is important that the angle of offset be not more than 30 degrees. and less, if at all possible. To make any heater flue offset greater than 30 degrees is to invite eventual combustion trouble in the heating system.

If the bricklayer begins his corbelling on both sides of the offset at the same level, the cross-sectional area of the flue throughout the offset is materially reduced. A bottleneck is created which increases frictional resistance and slows down the velocity of the flue gases, reduces draft intensity, and volumetric capacity of the chimney.

To explain volumetric capacity: Even when carefully made, chimney offsets will create turbulence and friction. These two deterrent elements will tend to reduce the velocity at which combustion gases flow upward through the chinney. The more sluggish the flow, the greater will be the cross-sectional area necessary to carry the volume of combustion gases which the chimney must handle. Whereas the cross-sectional area of the straight part of the chimney may have been adequate to carry the volume of gases produced, the bottleneck created by an improperly constructed offset will reduce the entire stack capacity of the chimney. The draft, or suction, potential of the chimney is likewise throttled.

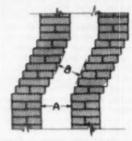
If a flue lining is used, a careless workman will all too often crudely knock off an end of the tile that is to go into the offset and insert it, exerting no effort to fill the jagged connection in the flue angle with a cement joint. Without properly mittered joints at the inclined section of the tile lining, chimney turbulence and frictional resistance are increased.

Because cracks may develop in even a well-built chimney, the National Board of Fire Underwriters recommends, and most city building codes require, a fire clay flue lining in the chimney. This fire clay lining should extend throughout the entire height of the chimney.

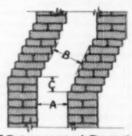
To assure a straight, amouthjointed lining, each successive length of lining tile should be positioned first and the supporting brick work built up around it. This is not the prevailing practice, however. In most



IF it is checimisty necessary to offset the fine, the maple of offset should never secood 30 degrees. Less offset is oven more desirable for greatest vanishes efficiency



A COMMON structural foult which presents fluo venting difficulties is on lacesnectly-built chimney offset. If corbelling is begun on both sides of flue at the same level, diometer of the offset section (B) will be less than diameter of straight run (A). This creates a bottleneck, restricting the valume which the chimney will headle



THIS illustrates correct carbelling practice. Hote that the bricklayer ran left hand side two courses of brick higher (C) believe starting carbelling on that side. This makes the diameter of fine offset (B) the same on the diameter of straight run (A)

cases the brick work is built up first and then the lining is dropped into position inside. The inevitable result is a failure to get tight joints between tile sections and a failure to properly fill the space between lining and brick work with mortar.

The joints between successive sections of lining should be made tight and the mortar used throughout should be that which is commonly identified as coment mortar rather than lime mortar. Various proprietary masonry censents now available seem to be completely satisfactory.

The objection to so-called lime mortar arises from the fact that many fuels contain sulphur which, after burning, shows up in flue gases as sulphurous or sulphuric acid. Lime is more susceptible to attacks by these acids than is cement and in time will disintegrate, leaving leaks in the chimney.

Since draft depends upon temperature differences between the interior and exterior of the chimney, any air permitted to leak in at any place will reduce the inside temperature and kill draft. Leakage is one of the most common flue troubles responsible for causing furnaces to smoke out of feed doors.

Officials of the National Warm Air Heating and Air Conditioning Association invite architects and builders with problems or questions about warm air heating mathods and system designs to contact them. In the interest of anabiling home owners to obtain maximum afficiency and anjugment from their warm air heating systems, the association, located at 145 Public Square, Clevaland 14, Ohio, is always eager to coussel designers and building contractors on warm oir heating systems.



CARELESS installation of five lining in the inclined section of the five creates un-accentry turbulence and friction areas.

(A) and (S), which retard the natural flow of the five quase out of the chimney.



PROPERLY mitered joints where the fine listing sections join at both top and bottom of incline rutain full fine area and reduce turbulence. All lining joints should be made persectly smooth and light



ADDRESS-Autonostic cleant light evolute, Der-Life Co., 198 S. Chrisfianz Are., Chicago 24, Ill. Inepandire awitch is connected to control socket by 6 feet of cord. Ho opticing, carpacity, or startrical connections recovery. Common socket plugs in light sacket; automatic switch features to don't beamatic switch features to don't beater.

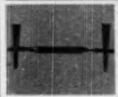


ASIMBED-Adhaine A-I. Armshone Products Co., Borket, Ind. This exquents adhaine joins metals, glass, occomics, plaetins, wasd, and other rigid moterals. Cossissis on relating occupant to the product up to rigid radio. Can be used on opp-filting material. Gures in 24 to 26 hours at room temperature.



ASSISSION—derror Speed Vin, of Barror Tool Company, Debroit I, Mich., batch day type workplow-wood, martel, plastin—in Sim, right position. Portribute or perchanent rise offspiles to any type work beach with three covers or both Schlashe for soving, planning, drill ing. Sling, sanding, Will sed mor.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ARBEIDS—Concrete form spreader rise. Pace, See 1898, Wilchite, Kex. Spreader rise are cond with requisit tablects from humber. Spaced its inches on center. Keys (seen in place above) are knocked out of the and when forms are to be stripped. The seed, snapped off with rufut, exidites 1/16 of on look.



ARTHITZY—Qii-Road wall furnate. H. C. Libite Burner Co., San Re-leaf, Catif. Units light themselves, do not infection with wall in well expeding. Not dengenous to children. Silmice units evaluate for flush floor or basement installation, gravity or furnat air type. Blackhic spellites practudes need for pilles.

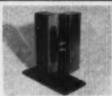


ABSSCI1—Gaster curter. Zirremmen Packing Co., 2388 Hillphine Ava., Clicinsant 12, Okto. Modure of the Control o

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AERBY33—Stackbin continue. Stackbin Corp., Pawhechet, R. L. Inferfecting steal cells of two to six birs such. Made of heavy groups walded chear steal and fluished in hained green enumed. Base and counter top our availability. Made in five sizes from 4x10x17 inches to 1x00x17 inches thomas from him.



ASSISSO — Sone (evisible bings, Sone bitlg, Co., Detroit, Mich. Nilogo has no protroiding bings butt, is mortised in door and jamb, hidden from view. Allows flush, smooth, streamlined interior effects. Makes household cleaning saster. Operates on hardward steel retier haardwar in warines binas dies.



ASSIGUE-helidwest pachoged right blitchens. Midwest help, Co., Gallipburg, III. Package includes dish and matching wall cabinets (said shows). Cabbiets have 4 linch listlaum-covered batchisen, all-dish laps corrected with listnesses, sidpercoloin bowts. Since 54, 64, and 72-inch widths. In four calors:

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ARTIGIZS—National art baseboard.
National facilistor Company, Johntown, Pa, Shewn above, Type 87
for Such-to-wall installation, Type 88
for semi-recessed intelligence, Designation of the Semitownship baseboard and coder printer, A combination of redisast and commercial baset. Selfself-commercial baset. Self-self-citifities.



A\$30056 -- Series F199 "Vacuum Droft" oli-furning winter al: condiffiners. Rorge Heat Dir., Borg-Wenner Corp., Belloth, Milch. Alr and oli are publied into extendigation in perfect proportion to burn completely in telefores steed fined combustion chamber. Available in two class: 90,000 and 10,000 8.7.0.1.



ABB0156—Everselli efectric automatic valte software. Sortillare Colfineria Co., 8 Segundo, Catif. Constant and selimited enpoly of software and selimited enpoly of software and software software at all times, respective of how much or how frequently softw is used, Unit responseries if-ooff of night. Finalit lines testis.

# **BOCA** Performance Code

By John Weinhart
Vice Chairman, National Association of
Home Buildors Committee on Building Codes

Offers Solution to Complicated, Costly Building Code Problems

ONE of the most significant forward steps in building code development in several generations was made late in 1949 when the Building Officials Conference of America completed writing and adopted a new basic building code. If this were an ordinary code, its completion would not be a forward step nor would it be significant because we have had material specification building codes, which have been tagged as obsolete, for years. This new BOCA basic code establishes minimum performance standards, and does not specify materials, thus finally bringing to the industry a code which automatically accepts new materials and methods just as soon as they have passed standard performance tests conducted by a recognized agency.

A building code, such as the new BOCA basic code, can never become obsolete because it sets up performance standards for strength, hre resistance, sanitation and similar factors. As long as a material or combination of materials performs to satisfy minimum requirements, it must be accepted, regardless of whether it has been on the market for a century or only since yesterday. A great many of the 2,200-odd specification codes now in use throughout the United States automatically bar many new materials and methods because of the inertia of local code authorities, plus the difficulty of obtaining amendments to the codes to accept the material, plus the opposition of unions and competitive producers and distributors. Light gauge steel, reinforced gypsum, light weight aggregate masonry block. plywood and metal skins for house walls, resin bonded blues, prefabricated plumbing panels, BX electrical cable and new insulating materials are denied to the residents of hundreds of cities although they have been proved acceptable in labpratory tests. If the new BOCA uniform basic performance code can be adopted generally to replace the obsolete specification codes, these problems of acceptance on new materials and techniques will be largely eliminated.

Late in 1948, the BOCA adopted an abridged edition of the basic code to satisfy a demand from smaller municipalities. One free copy of this abridged performance code was made available to every incorporated city or village. More than 2,000 were distributed and hundreds of municipalities have adopted the abridged code. The abridged edition deals with structures up to three stories in height and has proved an unusually practical document for cities up to 25,000 population. The recently completed basic code is an elaboration of the abridged edition, closely correlated with it, so that the latter can be enlarged by merely adding sections from the unabridged basic

Each community which chooses to adopt the basic BOCA performance code must amend the uniform draft before adoption to establish minimum requirements which vary, as a rule, with soil conditions, climate, topography and weather. These local code variations are minor in relation to the over-all basic provisions of the code.

It was five years ago that the Building Officials Conference of America decided that the hodgepodge of building codes in the U.S. and the haphazard manner of revision should be eliminated. At the same time the group adopted a vigorous program aimed at promulgation and adoption of a uniform national building code. With the assistance and full cooperation of the best engineering talent in the country, the new basic code was written. While more than 630,000 man hours was spent gratuitously in writing the code, almost \$100,000 was spent in travel, office and clerical expense. A committee headed by Luther Boggs, of Atlanta, Ga., and the writer as vice chairman, represented the National Association of Home Builders in industry-wide sessions on the new code.

Further implementing the current movement toward uniformity in performance building codes was the organization in 1949 of a joint committee for unification of building codes, embodying representatives from all the major code-writing groups. This committee was made up of representatives from The American Standards Association, Inc.; Building Officials Conference of America, Inc. and its affiliate, the Building Officials Foundation: Housing and Home Finance Agency; National Board of Fire Underwriters; National Bureau of Standards; National Fire Protection Association: Pacific Coast Building Officials Conference; Southern Building Code Congress; Underwriters Laboratories, Inc.; U. S. Department of Commerce, Construction Division, Four meetings of this joint committee have been conducted at which action was taken to establish uniform basic standards for definitions and terminology. The committee will continue to develop unification in the classification of all the groups of buildings, types of construction and other fundamental requirements.

When we realize that 47 per cent of the 2,200 existing codes in the U. S. have not been changed for 20 or more years and that the remaining 53 per cent with few exceptions, have undergone only minor variations in the same period, it is easy to understand why there is so much discouragement in developing cost - saving materials, practices and equipment in the building industry, particularly in home building. These old codes have not been changed to admit new materials and new techniques because their makeup forces such a herculean task on any individual or group wishing to even initiate a change, let alone make the changes. City officials, who, as a rule, know nothing about building or materials, call for an endless array of statistics, research, procedure details and requirements-all correlated to current accepted standards developed by years of practice and study. The most popular code revision technique is to take the existing code, review it, accept most of its provisions, changing only those specifications on which attention has been focused by pressure from an individual or group.

The new uniform basic BOCA code can mean tremendous savings in volume production of standardized building materials, accessories and equipment. The new code establishes use groups for structures, uniform for all communities, so that if a building is intended to house a certain number of persons within any given area, the same standards prevail in all communities. The fire exposure test and fire resistance test on any given material or combination of materials is the same in Georgia as it is in Montana. If tests prove its qualifications for acceptance under the performance requirements of the BOCA code, then it can be used wherever the code is accepted.

Because this is a performance code, the testing techniques on new materials and combinations of materials is of especial importance. The plan is to have the existing Building Officials Foundation underwritten by manufacturers until it can become self-supporting. This BOF would become the clearing house which would submit materials, equipment and techniques to accredited laboratories for tests to determine their eligibility under the BOCA uniform code standards. This foundation would logically supervise the tests, assemble reports and make reports available to all interested groups. Work would be carried on closely with the U.S. Bureau of Standards, the Bureau of Fire Underwriters and other established groups issuing reports on standards and practices of interest to the building industry.

No building code, regardless of how good it may be, is enforceable unless it is backed by law. It must be passed on by the local governing body, which is made up largely of individuals with no experience in building or materials. Therefore, it behooves every individual in the building industry to educate himself on building codes and offer his services on local code committees to help the harassed politicians who are striving for the right answers to code problems. Many times there are selfish interests that must be investigated and properly classified regarding code preparation. This problem must be faced whether the interests are labor, material producers, politicians, real estate people or builders and contractors.

The Building Officials Conference of America is one of four prominent groups advancing codes for adoption. Others are the National Board of Fire Underwriters, the Pacific Coast Building Officials

(Continued on page 316)
American Builder, February 1950.



ARRORI — Lawyl-hord scaffold clamps, Beacher-Len Corp., Swiffinger, Cone. Roduce accidents dies to shale, springs platforms. Holds plants in firm, Israel position. Make willing eacler, and reduce felligen. Clamps swifelable in ringle and drobbe mediate, or may be built to concline the second control of the concline second control of the concline of the second control of the c



A.B.8020 — White-Law, porthebits power year. Perahang Mannehritaring Co., Bridgeport, Cenn, Sevas sews to cas, it can be used on a rip, created, sevil, beylenis, or stagling new, and, when attached to William Sew tables, it works as a band or (ig on- Waight, Hy prevent, Curl wand, boase aftestife. Sither beands.



#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ABSIONS4—Butary fired winter air road/fileology still. Aucher Paril Products, Inc., Baltimore 34, Mrd. Itis new addiffice to firm's Photol Nead Division to sonly 5 inches high, occupies 67/pallyi-inch fileon poca, and fired with Phile Heat rotary burser. Delivers 10,500 81. U. s. no boar of fileoned warm air.



A \$250003—50 ver Strack vanishing down beinger and track, model No. 1891. Exhads Willow 1869. Co., Aupena, 101. For one in this well-pecketh built to standard 28-femilik shedded well. Also for use as perallel residential ward-onks denny lij.-Inch or more in thickness. Wheel



#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



AERSS12—Paint brush cleaner. Th Savegran Ce., Bothes, Mess Ruffsses, sour difference cleaner is rapid software of hard brushes cleans feathy-used brushes quickl to germit change of calor or the age. Cleaning is by creating hristins and wiging on dry clean Will and have halv or repens

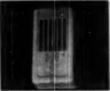


ARXIDAT — Aluminum charm windows, Uniformal Fabrications, New York, N. Y. Frames of Universal storm vindows are satiruded from ARTS eleminum. Air space between glace in glass between catemants and others passed in 1 Millionian for efficiency of insulation. Plas air-insulated robber gestelli.



A 820037—Showar. Speakman Ca., Wilminghon, Dul. "Restring Sale Court of Speakmat Santinal shower, maintains dis Sentinal shower, maintains discharge of water at a predaterable of temperature. Wurks automotible oily on water pressure alone. Cat be resouved for impection or cleaning without tretting off water.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



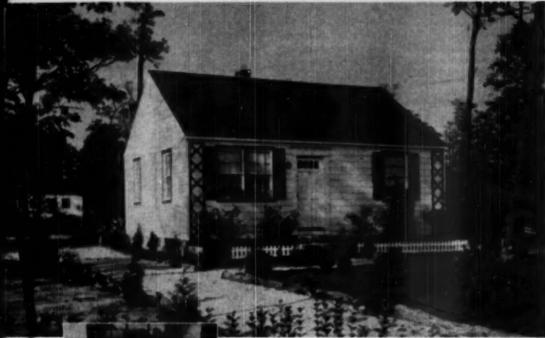
AESSID46—Disor bell. Cable Siertric Products, loc., Providence, 8. 1. "Snapit Moledy Bell" feafures use of tend ber, with a resnance seeing resolving when ber is struct by oscillating mortion of driber. But is housed in Irony plastic case, 4x10, inches. Affactsside to wait without security for



ASSIDISH-Home inclinerator. The Clear Manufacturing Can, Buffer, Wils, Mestal parts of Little-Cinerator are teasy cast iron. Her fire brick fining, adolestic board ovter jucket. John of air setter of corners of salt to feed flavors and aid combustion, both primary and secondary. Fact are osally assembled.



ASSISSION—But! and helf surface spring bingse. Nestional billig. Co., Sherling. III. Left belove, heavy sheet full surface spring bings. Mo. 125, made in S-lork size for rither right- or left-hand use. For screen or show doors, combination screen and show doors, combination screen



HE of the \$4.990 LaDolco bouses erected on Long Island by Dolan & Lewis, Inc

# Volume Achieved in Panelized Shell Houses

Long Island builder successfully merchandises low-priced, uncompleted units to the public and to speculative builders. Houses are FHA-approved and many of them financed under Title I Class 3 provisions

IAMES LaDolco, left, and son, Charles

THE erection and sale of low-cost shell houses in Suffolk County, Long Island, during the last building season was an important factor in the large volume of housing completed in that area. A large portion of it was financed under FHA Title I Class 3 provisions.

One of the most successful operations catering to this market is the Long Island Houses and Lumber Co., operated by the father-and-son team of James LoDoice and Charles J. LoDoice, who are selling about eight units per week, ranging in price from \$1,375 to \$4,500 or \$4,850 including a lot. Their basic house consists of a living room, kitchen, two bedrooms and a bath. It is a wall panelized unit, precut and fabricated at a plant near East Patchogue, Long Island.

Wall framing is conventional

2x4 No. 1 fir with studs 16 inches on center. Sheathing for walls and roof is 5/16-inch fir plywood and subflooring is 16-inch fir plywood. Corners are braced. Framing is assembled on jigs, some of them up to 32 feet in length. Each side wall leaves the plant as one piece. When drop siding is used for the exterior finish, that is also applied in the shop. Windows are set in the jigs and the siding brought up to them. Windows are then lifted out and moved to the job site as separate units, where they are inserted in the openings and nailed in. Siding shingles, log cabin siding and other materials are used on exteriors besides the drop siding.

In addition to the wall, roof and floor sections, with windows and exterior doors, the basic house includes an oil-fired floor furnace. kitchen cabinets, kitchen sink, electric wiring and fixtures, full bath and shower, bathroom cabinet, and assembled interior partitions with gypaum board. Flooring is asphalt tile. All ceiling gypaum board is



VIEWS of Jigs in shop where house sections are inhricated. Easy men are employed in this shop and on sizes, producting and arecting an average of eight of those inwarized houses per week

applied and all interior walls in bathrooms are covered with gypsum board in the basic house. Insulation, interior doors, trim and paint are not included. This unit, delivered to the purchaser's site, unassembled, is priced at \$2,680. For \$295 more, the purchaser may buy a package from LoDolce containing the necessary materials to finish the interior including insulation for walls and ceiling, all molded window and door trim, base, and ceiling cove molding for the living room. The package also includes five complete door setsjambs and doors prefitted with hardware attached. Sufficient paint and nails are also included.

LoDolce does a complete erection job for those purchasers who do not want to do the work themselves. In fact, most of the sales are made in that manner and are confined to sites within a 200 to 300-mile radius of the plant. The price of the basic house, erected and completed except for decoration, is \$4,500 without the lot. This includes a concrete block foundation, a 7x8-foot concrete block cesspool and a shallow well pump with an 18-gallon tank and 300-gallon recovery rate per hour.

The rapidity with which these houses can be delivered and assembled on the site has tremendous appeal to purchasers. The floors, walls and partitions are assembled, exterior doors hung and roof shingled on the first day. On the second day, the plumber is brought in to install rough plumbing and wiring is completed. The third day, after partitions are completed, plumbing appliances and kitchen cabinets are installed to finish the job. The well, cesspool and foundation are, of course, completed prior to start of house erection. The chimney is concrete block with a terra cotta 8-inch flue. The price on this job includes concrete stoops front and rear.



ONE side well section of a bosse on it leaves the ligs, ready for hauling to site



AASSMO.—"Throu-point blick," on increasing regular as a part of M.S.P. claust tunis. Mauritini Sentrary feetury, inc., Pursperitie, Chin-Device consists of an edgester wire or aliquing youts, clamp, and throuboth, used for fast institution. Kidder gastest acts on melion berease tools and bord. Fatter pand.



ABSENS—litted woll title with bonded generatine. Oblic Set and Crem-Co., Macelline, Oblic. Generative provides proteining creating proving or registing. In it colors as well as glassy and settle shall be well as glassy and settle shall be shall be shall be shall be shall be shall without pecial shill or experiment



ANIMATE - Creamental bings plotte. Street Manufacturing City. Othorpo 14, 181. For one or residence or tendence done, these bings plotte or tendence of radio cost former or cloted of self-cost for the cost of t

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASCISSISI-Convector radiation. Nodraw Manufacturing Co., Resident Wis, Four sections ships estimate in stendard line, dimensional in modular units. Curved orlinet algrille in within excitence. Benque adjusted by teech of bend. When closed, damper concerns orline grille. Removable front peerls



ASEMBLE-Terrace Vile. The Bribbs are Clay Product Ce., Altern, Chilo Idded for perios, survices or welft adeptable to percise, survices or welft adeptable to percise or fissen for spranger. Worther-resistant, vilet field tile may be imbeddied in ground or latel on the sortices. My diffield labor or special equipment capacitation interesting. Three since



A200801—Helder which. The Office Corp. Chiroge & III. Shocks which may be lestelled as Office bloded '77' or '88' industrial what brauke. Billictor operation for shamp pulling and troving, per over heldings. Which gives from tractic transmission. Speak

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABISBON — Fork-lift truck. Clark Equipment Co., Battle Creek, Mick. Growth-desire, greding lork attachment applicable to all models of Clark furth office trucks of 3889 powed capacity. Handles bulk materials too targe to pass through Jij-lank creen. Fork has Si-linch dilemeter removable fries on I-lank certex.





ABSIGNT- "Spires" hybrider spire such balance. The Catheuli Microil facturing Co., Reckester 4, N. V. Con be installed within such in or set of frame. Can be objected offer balance in installed. Only three or four terms regarded to ten sine belonce 1943-10. seek. Poli fire diffice govern Code to operation.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AR3882 -- Styline "Over-Act" pleatic wall tills. Skyline ledestries, Uhundia, Fa. Hard Enisted predict weight eligibly more likes precise under tiller. They preferations in sectificacy force cannot through to mating tile, forming saild rivel-head context. Innet bevinte digs.

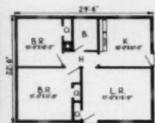


ABISEST-Grainises cheef contribuing sindow for glace block opening, blackers Stations Specialities Co., Chicago 21, III. Heads and jumbs designed for chreegth to exposer load, Tolleder seek oneclipating to provide a shanghr and rigidity to reduce glace breakege. Automatic austal to metal seatines.



ARRIBISI-Redward phywnod, M and M Wood Wathing Co., Partiand 1, Ore. Above, McSachied Indian and Market Mar



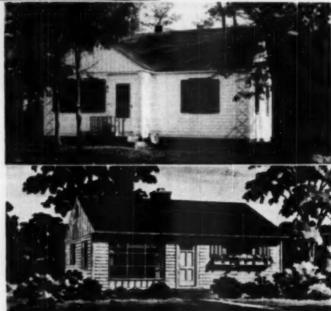


FLOOR plus of the basic LoDolos shell house financed under FHA This L. Clean S. Locol codes and sening restrictions permit exection of houses in the Suffells area.

TWO wartestons of the LeDates bousses' belang arected and sold in Oathbaven project on Long Island by Dolan & Lewis. Inc. Price of the basis bouse. 90 per cast completed, on a 78x150-foot lot in 94x950. The model with the unfinished critic selfs for \$5.540 in the same project. About 128 units were sold here by end of 1949

The houses, designed by Charles J. LoDolce, are varied price-wise, with the cheapest a "Sunshine" house with no partitions, sliding windows, unfinished floors, sold as a package to be erected by the purchaser for \$1,275. The basic house, which has been described above, is advertised as the "Fair Deal" house. During the summer of 1949 a large volume of sales were made on the "Sunshine" house and also on the "Fair Deal" house to individuals and families who erected them as summer bungalows.

LoDolce will sell his houses to individuals, builders or dealers who may erect them in speculative projects or on order. The largest development of LoDolce houses is Oakhaven at East Islip, Long Island, promoted by Dolan & Lewis, Inc., developers. More than 120



1950 LoDulce house, which will be built with the sume floor plen on the 1949 house



PARTIALLY completed "Fair Deal" panelized bouse assembled over a full beasses. Note plywood sidewells and roal decking with bevel sidture on eable ends. Bidewalls will be completed with wood skindle ciding



THE basic "Fair Deal" house which sells for \$3,830 delivered to the site, unassembled but including plumbing motierial and flatures, kitches sink and cabinets, floor furnaces, pertitions, gypsum board, insulation, interior door units and interior trim. Exected and completed on the site, without lot, but including foundation, cusapool, water pump, insulation and double wells, selling price of the house is \$4,100 to the college of the colleg

American Builder, February 1950.

houses were erected and sold there up to the end of 1949 and plans call for the sale of about 100 in 1950. The hasic "Fair Deal" house is erected and sold 90 per cent completed on a 75x150-foot lot in Oakhaven for \$4,990, including the lot. Models with expansible unfinished attics in Oakhaven sell for \$5,340. These developers have been very successful in merchandising the 90 per cent completed LoDolce houses to low-income families, who take great pride in completing the small amount of work left to do such as interior decorating and a few exterior finish additions. The large plots provide plenty of outdoor area for children, in addition to gardens, flower beds and garages. A good proportion of the residents of Oakhaven commute to the New York vicinity for employment. For those who wish to live in Oakhaven and work close to their residence, Dolan & Lewis offer assistance in finding employment for them. Dolan & Lewis are planning a small shopping center at Oakhaven.

The LoDolce firm employs about 60 people in the plant and on house erection crews. Framing lumber and plywood are purchased in carload lots. A versatile crew of men from the plant are transferred to the building sites when work is unusually heavy at the sites. When work in the plant calls for more help, some of the men regularly on erection crews can be switched back to the shop to speed up work there.

Power equipment in the shop consists of four radial saws, one small hand saw, three table saws, one planer, two mortisers, three powered hand saws, two electric drills, and sharpening equipment for the tools. Four regular trucks and one 30-foot tractor-trailer unit are used for transporting materials and house parts. The large tractor-trailer unit is used exclusively to haul house sections.

In addition to fabricating house parts in the plant, orders are filled for precut material for contractors and builders in the area. LoDolces are also filling orders regularly for small prefabricated farm service buildings, garages and warehouses.

The Long Island Houses and Lumber Co. operation has grown steadily during the last two years.

The increase in business which followed Charles LoDolce's introduction of a model village to the public warranted the use of larger facilities and from there on the business grew to its present proportions.



ASSERT — "Devo-Floror" Rose baster, United Air Moctors, Inc., Sasttle, Wosh, Ush's Underweither Laboraterian apparend. Employa forced drolf, ferses-patholic burnor located at top, Misserto Binches in crow-ell depth. Cutput In M.500 8.T.U. Plus Sour-Inch prossblemen Chebra continue of their



ABINEM-Plush ponetiod "Wedge-Tight" overhead settlenet garage donn. Catder Mfg. Co., Lentarlin, Pa. Informet framework of wood is sovered on both sides of wood is sovered on both sides of wood. Common standard sizes in stock, any design furnished on wrder. Deser oporeto on "Medica Tight bardware."



ABBBBB-Fuel Brouge 36 trust strcylinder angies, fuel Moder Camseny, Deartern, Mich. Lorger Fard ob-cylinder angies for series F-4 tructs confishe an optimal opelpman. Develops 10 HAP, and 22 peand best foregan. Has forspend systèm-allast trepassizion. Spaippad utils self-cleaning volves.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABIRDAS—Floor tock for material handling equipment, Bapids-Stude and Co. Grond Rapids, Mich. Cootreched of steel and arc-welled Floor lock, in stream medials, is designed for one with Repithan care on Nos. 28B, 15, or 8b. Weighrarios from 25, to 6 possellfulgible trees 61/16 to Fly inches



AESSIDIA — Send-O-Bits for band spading. Marit Products, Inc., Les Angeles, Calif. Head sonder for sanding contoursed, convex, and irregular shapes on well on file terriquiar shapes on well on file terriquiar shapes on well on file terriquiar shapes on terriquiar shapes on the sanding of the sanding s



ABISSUT--E-pa-Gio mush-com fapburer, Espadiis Heater Corp. Id-Anepies, Calif. One-piece sell in solid cast Iron has adjurtolike at shalter for procise reservement is halacced relating chember, aspited tip ancherage. Little is at he ethacked to Mire Standard an

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASMODS — Twint-C-Medic corner base out?. Lyon Methol Products, force, Aurerse, III. Dealgrand as prafical biswage unit where right engiture is required. Exercise, in efficative line and the handle is released. Dies Habit Inches z 39%, inches high. Finish is white. Until fits with other Lyon bitches units.



ASSESSIÓ - Arabol lagging adhoriva. Arabol Mhg. Co., 108 E. 42nd St. Nisw Yunk 17, N.V. A plasticitad synthetic regio emplatos for cover ficialing on steam and hot water licas, ballors, tanks, cold water lines, air deche and similar lostella from. Makes poorer bond between



ASSISSA—Frush panel garage distri-Capital Products, Springfield, III. No nails used. Flush panels are alsoritizably bosoled to frame with unstrayout glove. Ball bearing flush relians and shears wheels. Simjoint tracts. Yaper seat cholley. Headroom requirements: II incibes special few bracket 45; Incibes special fore bracket 45; Incibes

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ABIBISE—Automatic decr-opasities devices. Act Engineering Co., Facodese, Calif. Cen be Installed without remodeling of decre, wells, or Boars. Door opasiting is directivally initiated by walking on Mithin those place order without of deer. Air-operated and typicalizelly controlled. Doors operate by lead.



ABSSSSM-Tenert gronteed gerops door bedieses. Forcet Company, Fauemoud, Cell? Cutoway above shows favort made gives bearings. Doit contribus pleas shed which revolves in relies bearings. All bandware is inspirited on jemb, does not employ weight, freets, cables, or outless, that branksh both to jamb.



ASSIBILIÓ—Sami-direct type trough lighting soft. Cutter Light kits, Co., Philodelphine, Pt. Ohar 40 tool candias of diffused litemination produced in this installation, stilling six warm white cold cathode longs. Dang crasseries insurantiadd longs from liter of sight. Sides and as langithmire shinking.

# Engineered Conveniences for 20th Century Living

Installation of manufactured and designed on thejob convenience features produce added comforts for owner of ranch-style home



ANGLED wall with largecased opening forms a portion of enclosed perch: this provides pretection from inclement worther for the entrance door. Full length translacent glass powel admits labil test enterence lab

VIEW of open parch at rear of house looking toward land. Sliding doors placed in center of window well opens onto poech. Ventilation in provided by glass lawres placed at each and of window well. Brick floor of porch is laid in booked weare pattern. White Shieh of wim and parch reed panels affractively contrasts the dark brown of stacce walls



110

American Builder, February 1950.

THE Frank C. Sheldon place in Arcadia, Calif., is an example of how special features that are likely to be used in ever increasing volume can be incorporated into medium and high priced homes.

The modern ranch house of today, which has grown rapidly in popularity, extends its livable square fout space over a large area on one level. This has a tendency to widely separate the various zones of living, making it difficult for the occupants to easily communicate with each other.

When Sheldon, who is a general building contractor, planned his house he recognized this problem and made provision during its construction for the installation of a complete Teletalk intercommunication system. Combination receivers and transmitters were placed outside the front door, in the kitchen, in the master bedroom and in each of the other bedrooms. This arrangement makes it possible for the occupants to talk with each other from these various locations, and to answer the front door from anywhere in the house.

Another feature embraces the wiring of the radio so that reception in either kitchen or master bedroom



PLAYNOUSE for children is located in a carear at rear of property. It is used as a quest bosse in an emergency



A BJ8885—Bartisezes unit, Grittordhi Co., St. Poul 2, Milm. Shredilly built of heavy gauge sheel with balled aluminum Stotch. Commo ready for use with Grittorish portsible cheal cabinet or for installatics in masonry. Confrol of head accomplished by humbing of a crosh which leaves or relate tits headed.



ARBODIO -- Girlde-away disappearlog stains, Parley & Leekscher Meanhactoring Ca., Bubaspus, torus, laset completely assembled, It requires one or two beans to bellet other ceilling opealing has been formed. All strew balas are drilled to insere proper localism of bardvare. Ceilling pocal is himped.



ABBISSO—floritosted volve citoristor. H. A. Thresh & Co., Fran. Ind. Available in six obes. Contently off-tubritapine gamps bearing, tubrication seeked in Shorth opining mounting, Episarted Statistics parties coupling. Simulation of tubritist parting coupling. Simulation and policies of tubritists of tubritists of tubritists of tubritists of tubritists of tubritists.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ABSESS—Steel door frame, The Echanomic Finageroof Dear Co. Eichmannic, ted. Equational with onpair of sheel butth unified to fram to wall as a oriversal critica plant and dust less to receive statch had of tubular type lock. Migpand on the control of the control of the of wall construction to be used of wall construction to be used



ABIBBBT — binacith fre-valarden halts, American Lumber & Treading Co., Chicago 4, Ill. Lumber or plewend purchosed pre-treaded in halts can be instelled and pointed as any office lumber. High or mederate fire relarded in treaded lumber has some structural strength a other lumber. Odorizes, constaining.



A \$20000 -- "Beddy-Fir" radwar combination window. F. B. Sch mackler Co. Harrhills, Obio. Fire piezo window with a universal over lap frome, I desipand to fir a standard opening without plants or triumeing. Comulate of two as uschions, and streen section, on a gradit frame. Factory examples.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ABMOSS — Combustioneer extended coal state. Combustioneer extended from the combustioneer the Beat Products Bugineering Co., Springfield, Ohio. Assures and carbon particles in coal without objectionable smooth at existing fareace or bother is not in disregarie, out quickly installed.



ASSIGNAL—Pior-Ever Vingilia ptatific title, Defource Fince Products, box, New York 16, M. V. In for-linch size, availables in foil range of 15 marbelliand patherns. Non-portous, grease-proof, water, shall, acid and fire resistant Tilles will expely long-toding beauty to any room of the home. Popular prices.



ABJOSS — Revare-Exystens The Walt fleshing, Barear Cropper on brain, Inc. Provides positive me chanical bond in away direction in the morter bad, assuring extendifical and permanent profestion against seapongs and feats. Does not require coldering at and joints, Easy to install. Legath 42 Inches

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASIBBM--Lemute lendelfon clips. The Lealington Supply Co., Climlend 3, Ohio. Fast, satisfactory multing tur application of insolation to any chaef metal surfacts. Such clip consists of pointed, hardeased sized shank, tougoad by breed, flat head for easy driving. Special summer better clip in position.



A\$20006 — Flat Bullt-in Caded shower. Flat blastal Manufacturing Co., Chicago 13, iff. Designed to be completely recessed in bathream. No. 11-8 has no exponent mutul ponets. Dear opaning in framed with special excellches



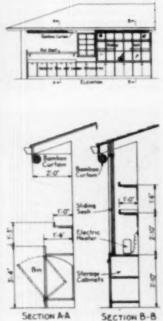
ASSIBRé-Me, del Readybuilt Fire place combination. The Readybuilt Products Co., Baltimare 33, Md. Cart brick dyle facing, fishing ont basets, otherbeis for gas heater or log. Capper hand over top of fire place opening in optimal. Purpose of hand in to delibert basit away from marties. Plaight. 80% inches



STREET view of house with San Gabrial mountains in the background. Carope driveway culminates in a paved torsecourt providing access to qurage placed adjacent to frost entrance. Exterior walls are covered with stacco painted a dark brown with contracting wood teim, blinds and trellis painted white. Seed is covered with coder shirtless



AN unusual feature of this plan is the lemat which is separated from the living room by a large planting bex and is confinuous with and a part of the adjoining dising room. Window well supervise land from rear parts. Quiet areas adjoin living room



SECTIONS and elevation of ministure but house and work beach adjaining rear wall of garage. Storage area under counter.



A TYPE of "Laxy Season" mode by Durasteel Products. The arms swing out and the trays can be retailed to bring the contents within easy reach. Cabinet is vented at Soor and cuilling, and to distpreed

can be obtained by turning a switch when the living room radio is turned on.

The Touchplate electrical system is employed throughout. Two sets of relays are located in the attic and a bell wire runs from switches to relays. Small plastic plates that operate at a light touch are used in place of switches.



OME section of hot house is left open. the other section is enclosed with sliding ploss doors and heated with small electric heater when necessary. Samboo curtain not comics rolls down for projection from sun



ASSIBAT — Ruid-Way TF Root cander. The Raid-Way Co., Coder Rapido, is, built around one moring part principle, revolving motutorns sanding drow. Redesigned with more pleasing lines, more royque construction. Fowerful band light, Sponga rubber molded and revisables directly to the drown



AE/8806—1.0 dectric celling vanlishmen. II.0 Eachtir. Vesellighting Co., Chicaga, III. Peolores neen of tabulacitics and operation. Figur Q for wheel combines fell copacify, opint operation. No radio or folleristion Intelligence. Automotic operation from vest worth. Large capacity, super galet.

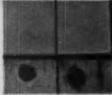


ARMINIO-below corton-belle calings. Bellem Manufacturing Co., Acrons. II. Bull Ser say type parch, patin, andersk or delines, Bulgand to give manients conlingation of spice manience contingation diseasance processor and "Tillo" dimension statutes and "Tillo" dimension sistema make all rollings may be order.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABBBB -- Acceptight, unit mounted General Lighting Co., Inc., Naw York 68, N. Y. Available In other mounting presuppersols, lack has one Perma-Teorism prival, anabiling it to remain forcessed in any positive, and an inordated handles. May be had in corol-red gove-green, upster-white and within



ASIMOTI — WP-ETE Keel Seals Common gratie pilm can be use for siding if leasts are convened will fill sealer before painting. Prvents discolaracións of paleted se faces by leaching of resins through paint. Formula crallible to an monofacturer, Write Western Fill Assertición. Perificial 4. Crasses



ASIMOTI-Softe-She holded curred forceredire voil passed; William bigsorferedire voil passed; William City, Mr. Bass motherful song as Well-life, of temperori Medicities. On temperori Medicities, of temperori Medicities, of temperori Medicities, of temperori Medicities, and temperori morten. Colors on passed, libes, or one, passed, libes, libes, or one, passed, libes, libes, or one, passed, libes, libes, libes,

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABSECT — Jackson borne distribution. The Jackson Distribution Co., Cleveland S, Chine. Regarden R) accords from to wash and risus load of distribution to wash and risus load of distribution of distribution



ASSODY — Convector Radiotors, Type F. Fedder-Quigan Corp., Bullaio J, H. Y. Eastly Installed to Eving rooms, beforeons, efficie and lustivetions. Can be used with steam, and forcad or greetly hell water systems. Can be used to transpareding unit or partially recessed into well. Handowen byte.



ABISSITY - Gas foreace. Homess Products Co., Columbus, Gita. Compact, with Rearthman stripport, self-prioring Rome restablish, type lorrer and Normon discipations during flams distribution plate. Westerd air remains close to arched but matel to obtain repid transfer of heat. Public to State 1998 to 200 000 8.7.01.10

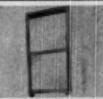
#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASSERS — Aluminum self-ofering "Security Sash." Security Co., Detroit, Mich. Standard class. Self-compensating glass and scroon paralls offeniasts ough for second changes, relibrings. Changing from thore window to aluminum screen and back again is as simple as execution.



ASSISTED-Superfex convention gas burner. Perfection Store Co., Crevision d. Olido. Automobilit gas softwir pillot, gas valve, gas presture requisitor. Memmetalfit control, and conventional pillot ligitifier. Authorized to carry official AGA. Liching symbol. For use with naturul, mixed, menofectioned, L. F. gasdi, mixed, menofectioned, L. F. gas-



ASSOCIO — Interación disuminum disubida bung sindova. Metal Aris blassolarchróng Co., Inc., Affecha. Co. Stalentes state berdeser sod disrusglessi. In 48 citos, digile rentica grangemente. Espo beforces no hasal de vindou provide lingurity control. Belances concaded in sast optional air ne entre price.



VIEW through large picture window of master bedroom showing landacaped area of rear yard. High worse wood fence extends along rear and sides of property providing a measure of sectuation within their own area. Flunting area inside of reur leave is kept used with the aid of wood barricade

VIEW in innut below. This room is separated from living room by large planting box. Rear wall of lensi is satirely of pleas with sliding doors in center of wall. Ceffings of both rooms are faced with three-inch-wide Y. & G. boards painted a being shade





VIEW in breaklust neak adjacent to hitchen. Additional cubinst space in framed sround fixed translucent quas each in window. Display space is provided by plate glass shalves in iron of wholow, interesting night effect is obtained by recessed light fixture in beam sofilit.



A CORNER in the large kitchen showing a parties of the cupbourds and Formice insunters in this room. Built is deak to an extension of counter at a lower level. In the wall over the deak is the intercommentor. Son system. Adjacent is switch for redio

Every room in the Sheldon house has a number of manufactured or designed-on-the-job features. Storage walls, cabinets and cupboards are provided for every possible use. Drawers and shelves built into wardrobes take the place of loose furniture in bedrooms; towel storage with open glass shelves above are built into a recess in the bathroom. A storage cabinet on one wall of the garage provides space for seldom used articles.

The owners' love for plants and flowers are shown by the number of built-in flower boxes. A large free standing box forms a separation between lanai and living room; another is located in entry; still another is built into sill of kitchen window.



OPEN bur shows the interior finished in mahopmay plywood including the inside ince of folding doors. Class shalves above and cuphoseds helow provide emple storoue area. Cupper sink is recessed into one and of the counter, Pluorescent light above turns on when doors are opened; extertor face of doors is finished to conlum with the odiotising wood walls



ABSHIM-Fin catric host phasts and mortes relies highly blacking to a part of the phasts of the phast



ABBITON-Salvage ber: December Steat Froducts, Boscher, bad, Denigered to make saay the removed of sold flooring, plessy flooring, plessy without demagning hospitaling, without releas traigns side of beauty the sold of sold of the sold of the sold of the demand to the sold of the



ABRETTS—Quicking hame freezers banktory Robingsrater Co., Fond do Loz, Wh. Medial fond banktor lockshad with asoft with filter with white banktorized finish. Filtergris immission. Lightweight fashis-hip fids. Up to BIS peemed or food can be stored in McDFlysRB-inch medial. Event models books 400 food.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ARIBITI — Fayette onderconfage assemblies. Feyette Menufacturing Co., Fayette, Ohio. For special trailor or specific transport need. Capacity up to 8,889 pounds. For learning lands, spring specifications can be changed or a feedem 6wheel assemblies, 15 or 16-lech.



ARROTTS—Warp-resistant capheard deer. Wisconsin Leminating Co., Chillon, Wis. Plyweed facings of three-ply hardwood banded to rise of low desofty wood. Banded will Baketite BCU-22 one liquid resigios. Rib Serieum facings preved unevanness, provide leterlar veetiiation. Sions flat under normal use



AERIN9 — Service-drop automodised and for our with pre-cesses shall meanings copported college to the Bechneline Co. Chicage, III. San 1998 assembled as one opious or One and deschable for installation articular properties and properties and properties and properties are supporting amburage. Feeting promits outs and sea indefinition.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASSENCE—Limit vanishars for glass block. Air Rectifiers, fee., Chicage 13, 60. Economy and utility medits or well or standard untillater. Economy model is in six and algebraics hase, with staintess shed low-ors on inside and outside. Utility model has glass low-ors incide. Comes in sizes 6, 8 and 12 inches.



ARROTS—VF Imperial doubte oran electric range model HD-57. The Conterester Co., Bulloth, Milm. Div. of firm's new line of savan models, this range has push betten 7-heat flogarity controls. Four-way arthmostic timer. King size oven plus hidaD-inch assillary oven. Office ranges include two approximant sizes.

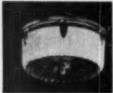


ARRENTY — Keether profebricated glass block pasets. T. Kirk Almogis Associates, Ven Neys, Carlit Meabs up roady to feetall as single cells by celling into place. Passis may be installed in homes or other buildings, see or old; found cells wood olding, struce, brick or coment block. Tree oligament

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASSB19—Sirip sat Rearing, publicled by The Hadissel Cat Fineing Manufactures' Association, Chicago I, IR, is available in reristy of shas and grades; can be obtained unfoldated or pre-finished. There is a choice befreen white oak, rad oak, and square-edips and tempo-and-greener style Bearing.

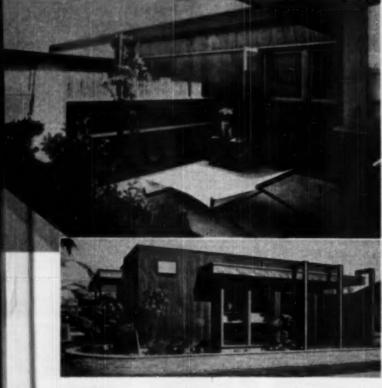


ASSO199..."Budget" tight fishers. Lighteller, lat... New York, M.Y. Small size, enclosed close to celling fishers designed to use diswell buffer selfer. All fishing spread firmings aperture in dis-cell beet certific social heat and filmingsh second verifiation gazes of tep. With one, two, and films lights.



A \$30000-4,ethn-Host refrigerator,
A. J. Undemain & Honerus Co.
Milhreshee, Wis. Available in fourmodels from 7.48 to 9.26 cells (setwith a notifiely of expigment and flothlee). Incorporating adjustable shelms and door alignment. Feesesse to calle trays and bernastical.

# MOTELS-A Big Opportunity for



#### By James V. Malone

Monopley Editor. American Matel Magazine

As popularity of these units increases, so increases the demand for attractive design, better materials and workmanship

ONE of the country's most rapidly expanding industries and one which is scheduled for its greatest period of growth within the next five years is the motel industry.

Some estimates show that there are now about 20,000 motels or tourist courts averaging 22 rooms each for more than half a million units. By 1952, according to these estimates it is expected that motel units will total 1,400,000, and that the bulk of these will continue to be in the luxury class with an average of 42 units each.

Luxury motels of the type now common in the south and southwest are growing in number in the north and east. Construction costs per unit

SPLIT redwood acreen caparatas terrores at the Holiday lim Motel, Long Seach. Calif. Exterior walls of these buildings are natural redwood, while attractiveness of the treats is enhanced by the use of fluted glass. Trim is pointed measured areas. Waldow homes are some sense.



# Builders

are variously estimated at between a low of \$1,500 to \$5,000, with one job in Dallas, Texas, now under construction, costing more than \$11,000 per unit. The newness of the motel idea and the speed with which it is growing is another one of those marvels of American public service which creates for the building industry an unrivalled opportunity. Motels are not only going in for the very finest in planning and materials but for the very latest developments in all types of building service: plumbing, heating, air conditioning, lighting, kitchen equipment, and, of course, for all the extras in furnishing and decorating.

A recent study by American Motel Magazine shows that among existing motels 23 per cent have investments, exclusive of land value, of more than \$100,000: 36 per cent fall into the \$50,000 to \$100,000 class; and 30 per cent have investments of between \$25,000 and \$50,000. Only 2 per cent have investments of between \$10,000 and \$15,000.

Preference by travelers for motels is steadily increasing, according to American Automobile Association figures. In 1937 tourist court accommodations were preferred by only 12½ per cent of the motorists on the road. In 1945, this figure had jumped to 38 per cent. Since 194½ with the growth of better motel accommodations and capacity business still being done by motels, it is clear that preference for them has again been enlarged.

The average motel investment for 1948 was more than \$69,000, a \$20,000 increase over 1947. This figure will show another increase in 1949 over 1948.

#### Plunning Plays A Big Role

Parallel with the increased demand for motels on the part of tourists is the increased competition among motel owners. These proprietors must vie for the tourists' trade with superior locations, appealing design and landscaping, more services, and other desirable features. Motel construction in each instance involves problems particular to the area, but in most cases many of these can be overcome by planning ahead, Experiences of those who developed and completed the attractive Holiday Inn Motel, Long Beach, Calif., point up the fact that initial planning played a leading role in the success of the mo-

Architect O. A. Pearce, when considering the building of Holiday Inn,



ABB017 -- Realizare, languages pre-saot constructs clots. The Final core Co., Inc., Bayton I, Chin Budgand for use with conventional building methods. Pre-directed clots of residencement previous high strength with light meight, Longin may be specified in lack variations complain or to 12 feet is inches.



AB3000—Overtube personnels toling Burchie Ce, Washington I. B.C. Superially designed for motivilary death is concrete. It releases to place only andit concrete is set. Can be used serend frame. Some of cumerous uses facilises transfering of durch in theory for conting or air recition testing, and withing death.



ABBIDNO-Ny Tosa discrit: boxes sambler: Ry Tosa, fice, Cincitentii, Cilles, Saissiel 10014; Shamiliartud nombors operate on from 8 to 19 voits, Willis each unit, perchaser in supplied with desired dilight direct from 15m. Can be bested up in parellei for bell type frontformer.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ARBIRID—ARIEN No. 3100 INIt/arient fiber saws Alize Free Co., Salamano, Mich. Three models, with Abbles up to 27/pdf/s/ inchos. Quick-positioning feater, fact acting blade controls. Salara-heavy concincultion, deep grouved but bearings, careful modelning solarors accounts saving. Has 16-Inch blade.



ABIDION—Alamativa Barmoda, aliminum resting, Alumativa Co., Inc., Glorodata 4, Colili, Shacha are 46 fast long with 12 lockse to the warther. Joined in water-great "Jainer Strip" aliministing overlops. Hips and valley lolled to flaid sheets with come mathed. Taken these to the come mathed.



AB350179—Tappen 1790 Model 0.79 renge. The Tappen Brore 0. Massfield (1616-161) into comment opera. High background, one-glost top, manifold panel and "mainfell" front passeling. Put like panel with one-glost panel and in the passeling panel and in the passeling panel and in the passeling panel pane

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AESSIDE-Time Baccerding tock.
Photon Time Beaseding Lock Corp.,
New York, N. Y. For use on Idercutive attiglass doors. Integrated with regular door lock. Small the provides prestition, inconspictors installation that unbarcas appearance of door, Baccets every opening, closing. Lock is temperproof.



ASSEIS—Afunitum ownings and disor-hoods, letstal Tile Products, Inc., Hearings, Mich. Engineered for new seamoily and instellation. Hearings abund-skield aweings and door hoods are built of JMB geographically disorders. Seven colorcontilisations or selid colors. Amings such have feen ride grands.



ASSESSIB--Coreae Michae codeless innit Tiss Richem Maid Corp., Bindirews, Ind. New swing short collect base unit combines affroctive Series with collect base unit combines affroctive Series with collect for the series of collect from the part of collect and formation of drawer mate maximum pee of coreae for week, beauge areas.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AESSEST—Surfishe and tendory. Home Appliance Birloine, Merray Corp. of America, Exerties, Pa. Earlinghe have "loophack" feature for communication conficience, All models Saidhed throughout with actid-residenting porcessing. White, bires, green, conditione and inony colors. Leaders of the colors of the colors



ASSRIP-Advance-cement shingle. The Asherins Company of Texas, Nothingles are manufactured in the shingles are manufactured in the shiples worn-edge and projekt-edge. Colors are natural white, foom gream done great and Pulcemine too. Skingle is shurdly noole, provided with selections

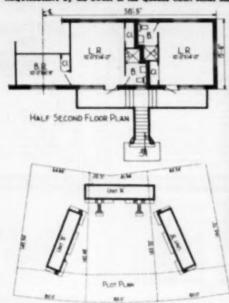


AS20030-bleter knob passage set Technical Siles Co., Inc., Los Angelos, Calli No. 68bells set can side of No. 68bell set can side of No. 68b cast matel knob and deadled from hole or supplier on the control of No. 68b cast matel knob and deadled house or set one or set one or set one or set one of the set of times. Ne footbing machinelism. Ne footbing machinelism.

# MOTELS ....



REQUIRIMENT by the owner of the Queens Court Motel units was that they be as firspreed and storm-proof as possible



SECTION of floor plum shows typical units in the Queens Court Motels owned by Jeco Nowton in St. Simon laland. Ga. Netice that additional innuit room may be used with one of the units. This may be used as a bedroom, while large room may be used for living room. Flot plum shows how owner teak advantage of lead to provide privacy for units



American Builder, February 1950.

felt that many tourists would prefer quiet, homelike accommodations rather than the bustle of the busy hotels or the rather commercial coldness of many motels. In preliminary discussions with the designer, this and other related factors were given careful consideration.

First, while the location was good, being far enough from the main highway to insure quietness, some means of attracting the tourist from the highway was necessary.

Second, due to government building restrictions then in effect, the design had to include housekeeping units (living-dining, bedroom, hath, and kitchen) which could be converted at a later date to more usable single and double apartments.

Third, the designers believed that since most tourists come to visit friends or stay for the season, every effort should be made to induce them to remain at the motel for the duration of their visit.

The first consideration being to attract tourists, the exterior materials, colors, landscaping and architectural details were planned to be eye-catching, yet subdued and inviting. The large expanse of lawn and tropical planting against natural redwood walls is a welcome contrast to glaring white stucco of many average motels.

The entrance drive placed at one side, leads to the alley and carports. All apartments face the center garden and each opens to its own patio shielded by redwood fencing and planting. Grey-green window trim harmonizes with the landscape. The greyed chartresse doors and the long thin line of the coping add a note of color.

All apartments except the manager's and owner's are a repeat plan for construction economy. All kitchens were equipped with double plumbing so they could be easily converted to baths when controls were removed. Connecting doors allow rental as a double unit or two singles.

Many of the exterior colors and materials are repeated on the interior. Redwood walls are contrasted with others of combined wood and colored stucco. Floors throughout are waxed colored concrete.

The buildings are built on a reinforced concrete slab placed over a 5-inch crushed rock fill. Wood frame construction, used throughout, is based on a 3-foot modular system. All outside walls are supported by 4x4-inch posts, 6 feet O. C., except for window posts which are three feet apart. All window and other openings are three feet wide. Sashes are set in movable frames. Fluted glass in front is fixed by means of wood



ABINETY-billier retary to aposed Trate Brill Corp., Konsec City, Ma. Corpe-see drill bill designed to drill own starting bots. Upper part than own thatting bots. Upper part than owned to cut, see, and yearn center of circles, verst, appears, strolls, other designs in light matal, brass, other designs in light matal, brass,



ABINDER — Under-counter dumbwalter until. Sedgelch Mochina Worts, 19 Eighth Are., New York 11, N.Y. Self-confinited dumb wellor coll for copicilities ranging op to 389 peecks, Schlabts for conti leadings conditions, CO all-mailed condruction, completally Staggered. Senature or is obsert Mikhibit to



ABSBITI—Theirman chimmany. Chimney Seins Co., (SIB Shewarth St., M.W., Washington I, D.C. for onwill say feel in one and two story beauth. Consists of citizeness susminicocted rised flux, jacketed by two concentrating placed alsonitoms ducts, aparend away from the and from now another for deat derice.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASSESS—files "Morpfiles" Inchesses blade. Clemens Brox., Inc., Middle laws, R. Y. Shad, theffergroud viles used in a frame. Blade in highly feelible and edeptable to high speed cutting. Analistics in all hand sizes and gifthes. Over all copper color. Specification or printed on the blades in grean.



ASSISTM—Cummins 6-lack care.
Cummins Spulsoss Machines Corp.,
CPB Revenuescod Are., Chicago M.
III. Adjustable for Sevel carb to any carpin up to 66 deprese, to one depth from §; to 1% inches for packet sed develope cotting, Matter opend of 4000 r.p.m. Becammended to rip and creas-cell 1-inch fumilies.



ASSISTS — Wrighten rubber by wright Milg. Co., \$222 Part Go dd., Houston, Tasan. Mas minimum oddies of \$85 pecunits per equinch. Law noise terms and rouse enter to marring make sufficient to the statistics or common wall on the residences and house that wherever could it designed.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



AESSIIS—Tharmostat. Defruit Lo bricative Co., Defruit, Milcs. De bricative Co., Defruit, Milcs. De troid No. 411 Tharmostat feature. "Timed Cycling" grincipte, and martically adjusting nome temperature to estelling canditions use socialed temperature, wind an uniar radiation, idealed is attractive to feature, unique an operation of the comparation of th

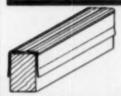


A \$200323—bidecomy uselar repellant, Protection Products Massidecturing Co., Kalamasea, Milch, Invidibla Raincheck is a colories water repullant which penetrate late all types of massery for protection against moleture and usele. Does not discotor massery and may be read on both lightims and solution.



ASSETSO--Enduro stainless steps roof direleage products. Berger Mtg. Br., Republic Steel Cerls. Canton S. Obio. Nems in the laciade 'k' garley, place round, conrupared round and corrupated round conductor plac. "Coupting" earns, and fiftings. Pabricated from the conductor plac.

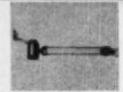
#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABIBBIO — Trigle Seal parting stop court: Weatherproof Products Corp., 137 Weatport &c., Kesses City 2, Me. Cover menufactured of opining browns is seeily introlled. Daripped to make a continuous metal covering for window jame, attention need of painting stop. New seak halance cover below metal.



ASSIBILIT — Cel-mont; water potiene. Colligen Zealth, Ce., Northbrook, III. A permanently installed water software party. Has psubbutton control for regeneration in few minutes. Valve exhaustically softy rises, and relayers soft to corvice. Automotic thain device for refilling application with water.



AERSHIM—Greanling door closer, the SM. Newall Mfg. Co., Lowell, Mitch. Door closer appealed to signed for one with combinative curson and shown door. Universal type turben spring makes change for right or lathhand opening doors unnecessary. Plumper is mailtand with a Neutronne com-

#### MOTELS ....

stops. Interior partitions are framed with 2x4 studs, 16 inches O. C.

Carport for these notel units consists of a roof supported by 4x4-inch wood columns. An enclosed storage and laundry area, situated in the center of the carport, forms a division for parking space allotted to each building.

#### Design For Desired Clientele

An example of how both location and design were selected to appeal to a particular type chentele is represented in the Queens Court motel units, St. Simons Island, Ga.

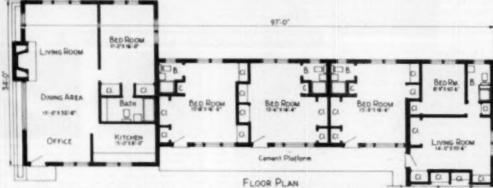
Queens Court is located in an elite section where a great many tourists demand deluxe accommodations. Architect R. William Marshall designed the three buildings on the property to meet exacting tastes and definite requirements. Simple straightforward design is enhanced by ornamental iron railings on stairways from ground level to upstairs units in the two story buildings, and in graceful horizontal lines made by



COMPLETE built-in kitchens facture Sub Stools Motel near Burlington, Wie.

overhangs and Spanish type balconies.

A definite requirement by the architect was that the buildings be as nearly fireproof as possible; another, that they be storm-proof. This was accomplished by using masonry construction throughout. Exterior walls, of common brick, are 8 inches thick, as are masonry partitions between motel units. The buildings have reinforced concrete slab floors.



FLOOR plan of Sub Steele Motel shows how closets, built-in klichens and buffercome provide sound-preeding between units.

Exterior view, below, abows U-shape of court. Lot is large enough to parmit on addition which will form of W-shaped building



#### Motel Built To Expend

A U-shaped motel building, on a lot large enough so that another wing may be added to form a W-shape, has proved profitable to the managerowner of the building near Brown's lake and Burlington, Wis.

Though the owner, Robert Steele, had six years experience in motel management and knew much about construction and design factors needed for a successful motel, to develop his ideas he worked closely with Architect Alfred H. Siewert, of Milwaukee, and with Schmidt-Bushman, Inc., local builders of Burlington. As a result, plumbing, heating and wiring of the new addition, when Steele decides to expand his business, will not add an unusual expense. The existing heating unit is amply large for the new addition, as are existing sewage, parking space, laundry and storage facilities.

The gas-fired heating unit supplies hot water through pipes embedded in the concrete slab floors. These pipes are connected to convectors in each room which may be partially controlled by occupants.

Exterior walls are 8-inch concrete block. Foundations are supported on 8x24-inch footings placed four feet below grade. To provide soundproofing and service to clients, a built-in combination kitchen arrangement and a bathroom forms one partition in each room, while a built-in folding hed and clothes closets form the other. Interior of exterior walls is furred out, with lath and three coats of plaster applied. Ceilings are insulated with thick batts placed between joists. Roof covering is 210-pound asphalt shingles.



American Builder, February 1950.



ABBETTO-Moins Epocet. Ravenus Metal Products Carp., Eastfile S. Work. Abeve, 25A-5A blockes reving spead for deck museting. Plageing central handle moves sideways and up and down. Side movement combrols mis of hail and cold water. Varifical movement control volume of water. Compress BOOTH 39 of water. Compress BOOTH 39



AB/MITI—Ladvon heavy duty, cylinden. Ledoen Mfg. Co., 1885 S. San Fadro St., Les Angeles III, Calif. Procursalit attacting cylinden used, to provide advantatic spneration of boilding black machine, Machine makes blacks By/Mfg/Hfg/ inches, of soil, cament, and chemical additive, using soil on site.



ABSWITT-Lastinehack all-purpose building paper. Prefective Papers, toc., Usion, III. An FHA appeared Class 0 building paper for one in all types of building paper for one in all types of building passers of that the paper of building to the that with long files content that cross and overlags for strangth fasts bit facilies or files necess feet.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABBRIT — Feet-Medelre celling tighting system. Selvania Electric Products, Inc., SSE Filth Ara., New York 18, N. Y. Hotte above those how lighting system is plugged into trolling duct and in turn attached to celling. Lighting Stervas and peanls are suspended on chelce from channels embeddied in the slab.



ABIRITYS — Nove-Shingle. Nove Sales Co., Tranton J, N. J. Earl in back of Nove-Shingle file over treat tip of Nove-Speed shingling city atimisating cost for nating shingles. Allow: 16-lech seperares. Clip is made in sight foot impths, provides insoluting space between



ASSETT-Medical soliting channel. Lanymeter Products Co., to., Clevelond 12, Obio. An invested heavy gauge clear ti-shaped plans with their road in center provided sechorage for Hellach and Channel is attached to carrying susburs by saddits or wire tio. Sell point forms tight less around est.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASSUME—Chromitrie motal mouldings, S. D. Worner Co., Inc., 295 1986. Ave., New York 15, N. Y. New Blass of stations steal mouldings in thirtees different others wallboard and wall lineleum chapes have also been added to line from which dealer can select fourteen to receive digate merchanilis.



ASSESS — Attached buildeser blode. B. G. LeTourneau Inc., Paoria, III. Suidosser blade effected to Model D. Boedster Tournegott is cosponeded in front of machine, cobin-octivated and stackcally-controlled by soilch mounted on dash control panel. "Store blode has hard leasth of 8 fast 8% in.



ASTRONO - Screen-o-matic drappoering vitrative screen, backless Manufacturing Carp., barroit, balich. Permanent installation, onto motits and reoligered: Earen telling draws, justiling up, drawage and painting man it is invalided. By quires no filting or special fools Adventume founding andly installed.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASSIGNM—Opsoin (emineted three panels The Upsoin Co., Lackpoor, N. Y. Principle products evallable lockeds panels for full-well conduction, for re-covering cracked or broken plaster cellings; Fibre-Tille for beths and birtheen, Irislanch panels for general cos. Panels affected with floating federates.



ASSO/To-Mester Universal Woodworker: The Mester Woodworker Mennfacturing Co., Delecti B., Mich. Twelve machines combined in one, it is a complete woodworking shop in their. Does cruesculing, risping, justing, dadeing, raufing, planing, bering, sanding, rabbeling, minering, other jobs.



ASSECTS — Myers angine-drivan "YON" Series centrifugal pump. The F. B. Myers & Bea. Co., ads. land, Otto., Bullivan large capacity against emerge presence. In 8, and one H.F. stee, this official pump is one in age "YON" Special line of pumps and water cystems for define or deam wall one



# Sunshine For Sale

By Martin C. Huggett

Executiva Vice President Chicago Metropolitus Homo Buildors Association

The next in this intermittent series of articles by Mr. Huggett will appear in April, and will discuss home building in the author's home city. Chicago

O ALL intents and purposes Southern Florida is a one industry region. Its inhabitants and for that matter the great majority of its visitors are all engaged in the vocation of selling sunshine. And so good a job is done in the Floridan's chosen occupation, that the Nation wears a path to its portals during the winter season and many thousands remain to make the State their permanent place of residence. Florida visitors and immigrants are not confined to the rich and the forancially independent but cover every walk of life, all intrigued by a mild climate and freedom from the rigorous physical problems of the North.

#### **Housing Program Enormous**

To meet the epic influx of visitors and settlers permanent and transient housing is being provided in enormous quantities. Hotels of all descriptions, in number exceeding the cities of New York or Chicago, within the limits of the City of Miami Beach alone, apartment houses and apartment hotels, row housing, duplexes and finally thousands of single family dwellings are rising like mushrooms in the night, to meet the purses of all, from America's tired millionaires to the lowliest workers. It would appear that practically every outstanding name of American industry is inscribed on the portal of some Florida mansion

#### Opportunities for the Ordinary Citison

For the ordinary citizen of the middle income group, Florida offers maximum facilities for the purchase of a home. The fact that the State exempts from taxation the first \$5000 of the assess valuation of every home offers near freedom from real estate taxes to the buyers of the lowest price houses and a major reduction in monthly payments to all others. As a rule, Florida home seekers have found that the monthly payments on purchased homes have been considerably less than, the rental of quarters of corresponding areas, and since veterans can usually purchase without or with very small down payments, home purchase has been the rule.

#### A Man-mode Domain

From the air, Southern Florida looks like one tremendous archipelago where some giant might jump from island to island to keep his feet dry. Miami Beach, a city of unknown size varying from an approximate one



ROOF of this Florida home is covered with locally mode coment tile of Spanish patters. Vesstian blinds are included

hundred thousand in the summer months to half a million during the height of the winter season, is largely built upon the same sort of ground as the lake front parks and boulevards of Chicago. A sand sucker is put to work transferring the ocean's bed to the formation of islands. In this manner the city is built upon some 38 islands, 28 of which are man-made. Causeways connect the city with Miami on the mainland and the channels between the islands are spanned with frequent bridges.

#### **Flat Country Has Problems**

An elevation of from four to five feet above sea level is presumed by Florida engineers to render land and buildings safe from hurricanes and such tidal waves as they create. A few miles from the coast the land sometimes reaches an elevation of from 12 to 18 feet, and becomes something to talk about. Builders advertise homes as being 10 to 12 feet above sea level. The extensive areas of flat land creates such a drainage problem that sewers are constructed only in the denser portions, while all residences built around the perimeter depend entirely upon septic tanks.

#### The Air Is Also Pure

Southern Florida is remarkably clean. After a number of years, buildings still look newly painted and in better surface condition than Chicagoland structures after one winter season. This is true because there are no smoke belching industries and no heating systems of any consequence. The largest heating plant observed in small dwellings was a reflector electric wall unit installed at a cost of \$25.00.

#### Citizen Employment

Aviation; the growing, marketing and preserving of fruits and vegetables; fishing to a limited degree, except sport fishing, which has shown an extensive development and the feeding, clothing and housing of thousands upon thousands of visitors, constitute the occupational pursuits of most of the people. The Chambers

American Builder, February 1950.

of Commerce at all times seek to keep permanent residents in gainful occupations the year round. On the other hand the Personnel Agencies are constantly seeking temporary positions for winter transients. This sort of competition keeps some workers in a constant state of mental distress lest their jobs be taken from them by oursiders. However the spirit of optim-



LIVING ROOM-dining room combination in a typical moderate cost Florida bome

ism that possesses everyone coupled with the great asset, easy living, subdues apprehension and holds the population intact.

#### The Lowest Priced Home

The best home "buy" observed in the Miami area was a two hedroom, 720 square foot house that is selling for \$5,750, including a 70x100 foot lot. The house is of concrete block exterior faced with stucco and plastered direct to the blocks on the inside. The blocks rest upon the perimeter of a concrete slab covered with asphalt tile. Ceilings and roof are formed by 2x6 rafters 24 inches on centers supporting 1x6, tongued and grooved, beveled and dressed sheathing. The sheathing provided both the ceiling and the roof platform. To the platform is applied a built up roof of



LOW COST Florida home reets on concrete slab, has poured concrete walls, partitions

felt, asphalt and crushed stone. The pitch of the roof and the ceilings as well is one inch in 12 from the center of the building. Windows and the entrance door are of "Louverlite" (glass louvres in aluminum frames). The selling price includes range, refrigerator and venetian blinds.

#### Another Sound Value

Another model home representing a (Continued on page 180)



A SERVINI—Availant aluminum phomo and screen complication of america. Alumetic Comparation of america, alliferance 14, Wis. Combines shorm, coreasiant with Self oberlog. Ownor can shift from shorm to acreans to paceade, from indexers. Still is removable. Come in standard sters.



ABISSIT - Coffmon's danderdized wrought iros steet stee selfices, and divelgit and sections. The B. G. Coffmon Co., Inc., Orlando, Plu. Coercostinosi, durdy, high quality ornamental iron. Compilate one pleas sections, welded construction. Combination of sections will



ASSISTED AND ADDRESS OF STREET, AND ADDRESS O

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AEXISTS—Gam DeLace duch typeoring gazet, with Spring Pin serial ing spout and and with bose and spray. Price-Plaine beas Manufactoring Ce., Los Angeles, Cellif Festives include attent offiling, assi of cleaning, cast breas construction, matel bead fiburab control or spray, full adjustment for all tinks spray, full adjustment for all tinks



ASIMITED-Figure 1999-10 Evenities autor system. Evenities Frump & Mainurbactering Co., Inc., Leacaster, PaCapacity, IBB quifloos per hour Available with 10, 10 and Bingal fon berlimmtal, gatrastized tents Unit with 18-parties raisk with 8 under a bitchen debt. The 18-part soot measures 29%;395(jul.2) lankers



ABTORNO-Turin-curvas sevel as and towal shelf-daying rack. As Authore Co., Quatritin, closes. Sar of a complete time of bethread and birchen accusantins. Comfessed ber has two 36-loch flush hart. Designed for attractive tem orrangement in corner space. Said

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASSINIS—Steading-Center HSB bings built router. Steading Steathric Tools, New Schlain, Cose. Cuts not for builts old times tester than is possible by hand. Leaves that surface for the built, insuring partiest 50: 104au shan round corner builts are being used on saw homes. Has 15-H.P. mother. Speed, 18,580 r.p.m.



ASSISTION - Lorversal Lovel-Transit.
David White Co., Alliveause, Wis.
Medical Sills Includes Myly-Inch pretected vertical arc, Internal festaing and costed applics, Indexnal festaing and costed applics, Indexnal festadist-free incide tens conface, and botter grottaction for optical parts and mechanism. Tripodo incidedat.



ARIBITAT — Beautifeat Ledder Gay and Ledder step. Beautifeat Lett. Seginew. Mitch. Shredy steat they broths occurrily to a convenient less der rung. Ledder step conserved energy, provides on overhead plathours that from hath hands for the job. Easily carried in one bend up the ledder of convenient mostifics.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



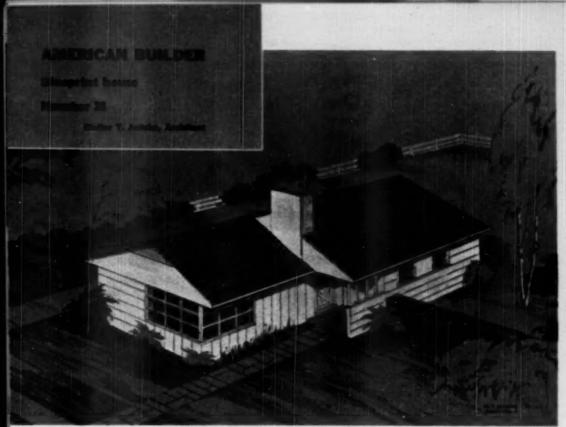
ABSBHES-Trinity Isoundry tray cablead. Kinear Machine Products Co. Lex Agazies 31, Call B. Designed 19 th all standard date of Isonello trays or type, cell affects through upons of about 18th/617 inches. As commodates ones and other cleaning materials. Made of benderland shall will be be seen to the comtact of the commodates one of the comtact of the commodates of the comlated with balant assent Solid-



A \$280170—blooded UV-60 Canthury furneces. Century Engineering Corp., Ceder Rapide, tows. Sometr affing of 66,689 & 7.5. When equipped with gas terrain in house at the US-82 and has input of 66,699 8.7.0. Can be fired by power raportiging oil or gas burner. May be used in cellify room or beaument.



ABBBI-bi--Sesh befance and weathordrip coil. Altmetal Waathuchilp Co., Chicape, Iti. Makes putleys, conds, bet fearnes and vesights ownecessing. Each is counterfast, amond with coil spring bendon to provide absolute soon is one position. This provides Engandig window contest. Coil section is communicated.



EXTERIOR is a direct projection of the plan layout without attempt at embellishment other than change in siding

# Economy House with Alternate Plan

To provide a livable twobedroom house with an expansible roof line that can be built economically was the basic thought for this month's blueprint house CONOMY without loss of living area was the prime consideration of Walter T. Anicka, architect of Ann Arbor, Mich., in designing the current blueprint house.

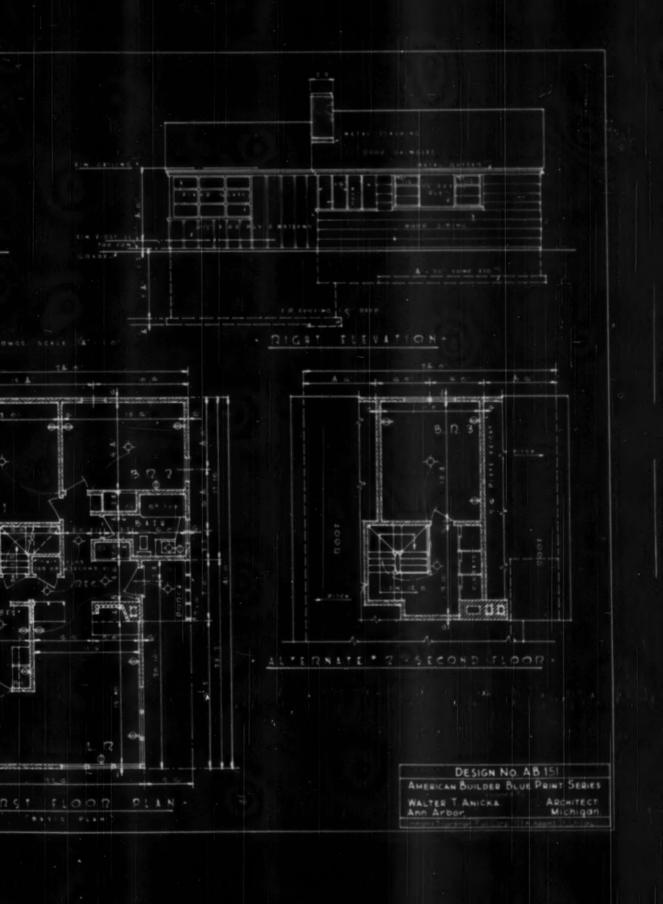
The house contains 1020 square feet of floor space including partitions. Space is arranged to provide the greatest amount of comfort and convenience for the occupants. The reception hall, placed in the center of the plan with a side entrance, provides immediate access to all rooms. The living-dining room and kitchen face the street with bedrooms overlooking the rear yard, away from the noise of the road.

Features in the alternate plan include a freplace with exposed brick surfaces on three sides, and a wood grille on side of living room opposite the opening, with cupboard below. The alternate plan provides for a basement under the front end of house, approached by a stair that is placed in the area containing heater as indicated in the basic plan. Heater and laundry service are located in the basement.

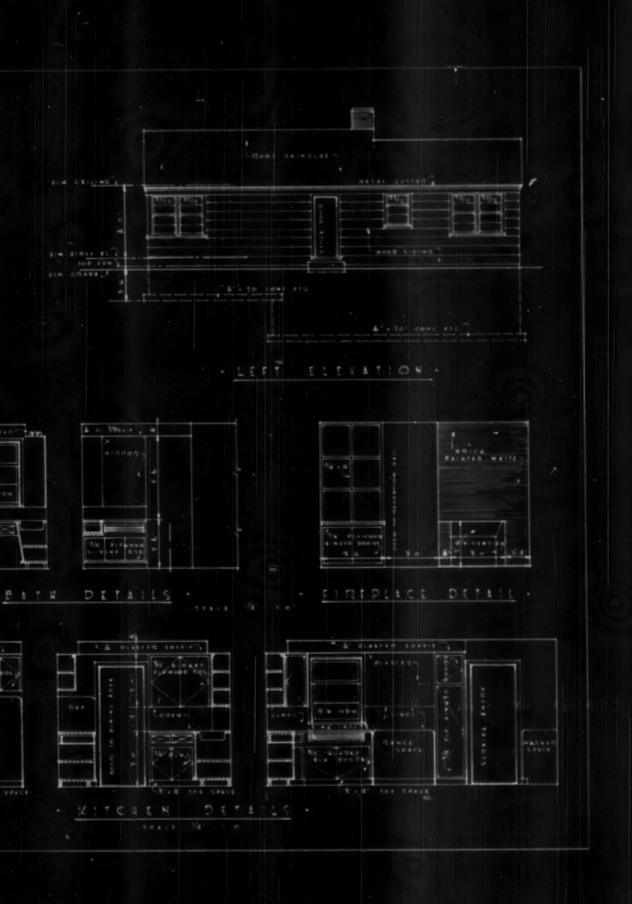
To provide for additional room, and yet not increase the square foot ground area of house, the designer altered the roof pitch to establish sufficient head room for a fair sized hedroom and closets. The increased roof pitch enhances the exterior appearance of the house.

The exterior of the house follows in general the pattern of design used by Anicka and which has found a ready public acceptance. Sidewalls are covered with wide horizontal wood siding, featured areas are covered with plywood and vertical wood battens. A 5-12 roof pitch is used for the basic house, and a 9-12 pitch for the expanded unit. Asphalt shingles cover the roof.













Interesting design, quality workmenship, service—this formula is answer to home building success

### **High Cost Homes Find Ready Sale**

N TOLEDO, like almost every-where else, there is a need for large scale low-cost housing. In Toledo, a city with its share of unemployment, you would expect, and rightly so, that its citizens are cautious spenders. All of which doesn't sound like a ready market for new homes in the \$12-40 thousand class - but one builder has proved that it is. Scholz Construction Company, a spanking new organization, in 1948 sold over a million dollars' worth of new homes and, in the year just past, topped the '48 mark!

President of the company, Don Scholz, aggressive young mechanical engineer who forsook the industrial field for home building has what he believes is the answer to the firm's success: "Interesting design-because exterior appearance sells - quality workmanship, and service.

Giving value in good measure is

no magic formula, but to Scholz Construction it has sold more than 250 homes since the company was formed in 1946. This, without the use of any regular salesmen and a minimum of advertising. The volume is predicated on the time-tried truth that a satisfied customer is the best salesman.

Big, hard-working Don Scholz believes in interesting design and his houses are graphic translations of sound attractive styles from blueprint to frame and stone and brick. The houses are, for the most part, colonial-ranch-type one-story or story-and-a-half-dwellings, of a combination of two of these three materials. He has built what he considers is the longest ranch-type house in Toledo-a 113 footer, and has also included a sprinkling of modern design homes in the jobs the company has turned out since 1946

Scholz utilizes new building tech-

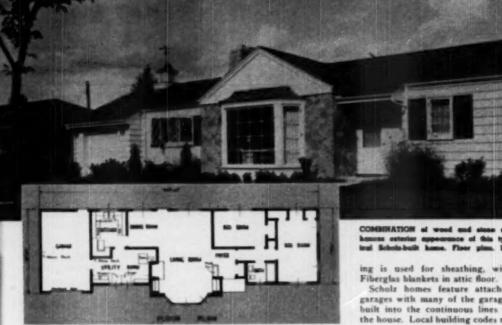
niques and products in adhering to the theory that interesting design sells. Glass block is found in nearly all of his homes, used functionally as well as decoratively in garages, kitchens, snack bars, utility rooms, bathrooms and on the street side in places where daylight is desirable, yet privacy is wanted.

In many instances he has utilized interior glass block partitions to 'borrow" daylight from an outside room, thus brightening up what would otherwise be a dark corner.

With no set pattern of architecture and no two houses the same, Scholz Construction does not use a mass production technique. However, all the homes are built according to efficient, workable plans, which are of mutual benefit to both the builder and home owner. The company regularly employs 35 carpenters to make up the three crews it uses. One crew does the rough framing. A second crew does the



PANORABIC shot of a street in Ottown Plains Estates illustrates the varied styles of exchilecture used by Scholz Construction Sen



exterior trim, cornices, window framing and door hanging; followed by the third and final finishing crew. The foundations and masonry are handled by another group of Scholz workers.

Subcontracts are let for plumbing, heating, roofing, plastering, electrical installation, painting and landscaping.

The heating units are, like every other aspect of the homes, according to the latest design. For the most part, they are a combination of radiant heat and warm air, with hot air registers and cold air returns along the baseboards, and pipes imbedded in the concrete of the floor

Recently Scholz has been installing underfloor plenum heating systems in basementless houses. A reverse flow furnace feeds heat into the space between the wood floor and the ground beneath the house. The heat is admitted to the rooms by baseboard registers. The earth beneath the house is covered with two-inch crushed stone and an aluminum foil blanket is laid over the stone to complete the insulating job. Furnaces in the Scholz houses are either of the oil or gas type. Rock lath with aluminum foil backing is used for sheathing, with

Scholz homes feature attached garages with many of the garages built into the continuous lines of the house. Local building codes require a fire-resisting wall between attached garages and houses, and Scholz uses a flush-type woodfaced door with an incombustible mineral core. This door withstands a one-hour fire test, thus it conforms easily to the local building code and is an attractive replacement for the old cement-asbestos faced door previously used.

Scholz Construction has two major developments completed. The first, Ottawa Plains Estates, is an attractive tract of 88 houses about 10 miles from the heart of the city. When the project was in its early stages. Toledoans by the score caused Sunday traffic jams, winding through the paved streets of the development in an interested, curious motorcade. It was at this time that many of the houses sold themselves. After the prospective buyer had been impressed by the design of the Scholz-built homes, an inquiry at the company office (a small building of construction similar to the homes) disclosed that Scholz could offer a complete "package" transaction including design, building, financing and an unwritten guarantee of construction.

The second major Scholz project is the Talmadge Estates in Ottawa Hills. The homes here are in the higher price range and for the most part are interspersed with other homes in this residential area.

The enthusiastic tenants of the



attractiveness to firm's typical garage



projects are quick to assert that Scholz had no "sell 'em and forget 'em attitude"—in fact, two of the Scholz employees spend their full time on customer service.

Another customer relations touch that has won the confidence of home buyers is the personalized service Don Scholz offers in his capacity as president of the organization. He designs most of the houses, assisted by a young designer, Robert Wahl. Scholz also handles the financing, the general supervision of construction and spends some of his time on sales.

Vice President of the firm, an able assistant to Mr. Scholz, is Lawrence Prince, an engineer who worked with Scholz in Hartford, Conn. during the war. They foresaw the opportunity in the home building field and left industrial work to return to Scholz' home in Toledo to begin their new business. Together with Scholz' father, who died in 1946 and Frank Snyder, finishing supervisor, they formed the new company.

Scholz Construction is a member of the National Association of Home Builders and finds the Association extremely helpful, particularly with labor contracts.

In January Scholz had a unique display at the Toledo Home Builders and Industries Exposition which was held in Toledo's Civic Auditorium. The firm constructed a home 71 feet by 24 feet, of a typical Scholz design. The materials were supplied gratis by the company's usual suppliers, the home was landscaped, and a large department store furnished it.

The problem of getting the house inside Civic Auditorium was solved by prefabricating it in 16 foot sections and then erecting it within the exposition building in about a



ABIBBIT—Balance-Beal cells. Balcatco-Seal Co., Medicon S, Wo. For decide long vindines, unifdies four jobs. Provides sain botonce, weether soot, parting drip, and inside step, tie greening of seath or greening of jambs required. Elizainates four weed nom-



ASSETS--Bemote control modes selective selecti



ASTRODO — Each Vant spellighes of uniform evenings. Each Vant bletch Avening Companyties of America. Pittsburgh, Fa. May be could forvised one, discus, porch and political shades, or or unspert. Made from elevant substance, discustemen, coverage over throug, discustemen, coverage over chrone, discustemen, coverage over throug, discustemen, coverage over throug, discustemen, coverage over chrone, discustemen, coverage over chrone, discustemen, coverage over chrone, discussed finish to benefit finish.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



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ABBOIGS—Precious todding state way. Practicion Partis Corp., Hashin Partis Corp., Hashin Partis Corp., Hashin Partis Part



AB30077 — Broadfile translucers glootic biseds. Neckmolder-loc. Pittsburgh, Ps. Schligbie for installation where the filterion of gloot biseds, but not their weight is desired. Standard Saishad panel, convolving 40 blacts, weight filters or the standard files of t

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



A \$256079 — Corrulus, transforcent shuctural and docorative pasel. Corrulus Corp., Househan 5, Tasso. A strong, attactive skyllighting material, or, because of its attactive appearance, may be used by decorative and architects for many massual decorative effects. It is shafterproof, cames in six colors.



A \$258079 — Kitchen cabinet unil. Storling-Freedand tedestries, loss, Chicago 2, 10. Unil contains ao tension table whick, extended, provides surface of BMSI lockes. Cabinal unit is 36 lockes wide, 21 inches deeps of boso and 36 lockes high, containing utility and storage



ABBBIGG-Gumperofe Dumperofe Dir., Mason Construction Co., Inc., Bayten 2, Ohio. Resent changes Include shaelerdised concrete capacifies of two, fless and four cribic pards. Gats wings are not higher with greater sings to persistif feature unicading. Discharge height on 4-year beely is 8 bast 4 incluse.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ARXINIA—Remote controlled floorilighting units, Stober Massulantuing Co., Broadview, Itt. Units coupled to new General Biochic remote castrol. Any number of evitches may be limitalled of conrealised locations proud farm or tense, and lights on be tomad off or on from any of these points.



ASSBISI-Pobricon charage colls. Febricon, Acotin, Tosse, May serve as partition with Misimum floar space needed. Fast installation billion collection to the process of the collection of the co



ABJEMIN-Orlamenter levelors. The Humphroys Manufacturing Co., Meetfield, Oblio, Measures 14 inches from front to woll, Medic of enameled sast Iron, Peatures Include compact miser Billing with nop-up drein, 3% inch wide shell back for foiled articles, and spacecoring boot. Bilmansloan, 1941 in.



AIR-VIEW of Bonnyville authorising concisting of 100 curse of level ground which is approximately 100 per cent complete in its construction program. All streets are laid out in a formall grid pattern with blocks divided by a service drive





OHN BONFORTE, one of the largest builders of homes in Colorado Springs, Colo., has been constantly expanding his building operations since his release from the army engineer corps in 1945. In that year he set up and completed a schedule of 10 two-bedroom houses which he sold for \$7,450 each. His next group of houses numbered 25. Built in 1946. they contained two bedrooms, full basements, and were listed for \$9,200 to \$10,000. In 1947 he moved into the \$12,000 class. He built 12 of these homes in addition to four four-bedroom and two-bathroom houses that sold for \$13,000 to \$17,000. Late in 1947 he dropped back to a two-bedroom house that sold for \$7,350. Twenty of these homes were built.

THE three-bedroom houses vary in oppearance on shown in phote of last and shirw. A combination of stucce and siding is used on fecting for one house with horizontal siding for the other, Pless plan applies to house shown at left. Boom and companies to varies slightly in house below



American Builder, February 1950.





HALL closet which became het water heater provider apone for hullbil ladder on access to utilic access Views hedicate ludder in apon and closed post tilled in the show top helding device top helding device

They were sold complete with range, refrigerator and washing machine.

The Bonnyville subdivision was started in 1948 on 100 acres of level ground on the north limits of Colorado Springs. A total of 90 houses were completed in that year with an additional 49 under construction. 1949 saw Bonforte move into high gear with 150 houses scheduled and 125 under way. The houses are twoand three-bedroom homes complete with range, refrigerator and automatic laundry. The two bedroom house sells for \$8,100 and the three bedroom unit for \$9,775. These prices include concrete curb, gutter and sidewalks.

Bonforte has found that the demand for new homes in 1949 was as good as 1948. Sales, which are handled by his own organization, are four months in advance of construction. Approximately 20 per cent of the purchasers are members of the armed forces who are permanently established in Colorado Springs.

The designing of the houses, which is all done by the builder, does not represent a radical departure from the norm, but rather adheres to variations of a simple, conventional type acceptable to all classes. Four different styles of exterior treatment are available in each of the two type houses that are built in this development. Exterior facing materials used are stucco, painted wood siding, stained redwood siding and ashestos shingles. Asphalt shingles are used in a variety of colors on all roofs. Bonforte appreciates the sales value of large picture windows and frequently employs their use, especially



ABBBBH-Improved Nandy allow the shingle cuttien. Specially los Manufacturers, Bellevilla, Id. Nos aluminum alloy model reduced in weight 43 per cent. Also conflicts in gray iron. Front-sed ports frandard on all current models in addition to handle punch. Northing attachment for irregular con-



ASSOMS — Well-honging corner cabinat, Ideal Cabinet Corp., Bufroit 4, Mich. Designed for use in bollinosms, bilistens and bedireoms. It has a mirror, 14-25 isothes, with a trioriom sheet from a ned two gloss shelves. Hondware is castimiom plated. May be quickly instabiled directly applied the well.



ABINDRY—Trailer-emerched personne compressors. Gerdiser-Dentrez Co., Quincy, Mr. Four specifing email air feels as misselfacesses service jobs. Copacity is ample for opercing point spring grow, objepting hommers, light persong branders, spediers, feetpers and dimilier presmatic complement. In three class.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AERBIT3—Steph-On barring deplex. The E. H. Hotchkiss Co., Nerwesk, Coes. Drives die freel dopplex in the time it takes to got in one tack with conventional hammor. Stephes grip-tacked materials heics. Hommer stopler weight i pound 4 conces, with almost all of this weight in the stephing head.



ARISONI — Floor screens. Hough Shado Corp., Jensoville, Wis Vodor Reulble Second floor screens can be manipulated into a variety of shapes and surface effects for a number of functional uses. Neight is 5 feet, 6 inchez adjustable width from 3 to 5 feet. Produced in a wide selection of attractive colors.



A830816—Packaged bethroom unit U.S. Percelain Enganol Co., Los Agrias, Callis. La Vanilly onlt con cits of generous-stead fersatine, with bottlin in certifiow, directing fable and shorage cabinat. Dimension or 65 inches dong and 31 inches high. Unit has porce

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABJ9037 — Latch. Grand Rapids Nardware Co., Grand Rapids, Mich. Adaptable to practically any lind of "latching-locking" machanism, the Grand Rapids Inth has been used in a variety of applications. One of sunceof features in that if holds desire seprenty tabulad despite workings or oligenment defects.



ABZERISO—Tritt-top trailer. Bay Miller Bosonrock Engineers, Millwouker, Wis, Frame of 10-from heary-doly blooks it trailer is formed of channels 12 loches deep in the center and of ½-inch sheet with fine cross-marribers. Three-inst channel astronds from convert to conse in forms of "X." With 10-from Budd wheels.



AESSELI—Yandem truck. See bisters, Inc., Lending, Mich. Her rerice of fendion trucks, powered by sumpany? Solid Comet gaseline ongine, rounds out line of tendem models: nonging from 26,980 for 17,980 pounds. Haw trucks in Medd 5,136 pounds. Haw trucks in Medd 5,136 solies rated of 14,680 gaunds, 6,V.W. Fire wheelbasss.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASINDPS—Board "R" boller, Kewones Belter Corp., Kewones, III. For shoes or forced her weller circularities in radiative, wall, floor, calling passink, or for reditert beaboard heart in homes and sheel buildings, Fashiosed for floid, ga, or salid fuels, Baadily convertible from machanical to hand-filting.



ARRIMIS -- Hunter disappearing cross and combination window. Comfort Products, Inc., \$821 Wayes Ava., Philadelphia 64, Fa. Twin stiding oluminum storm sindow has rolling crosses at base. When both from gloss insect is related, screen comes up to declared point. When towards cross- revisited in Insulings.



AEJBIOSE — Drudete-glessed window naiz. Fifthburgh Flate Gloss Co., Fittsburgh Fz. Siz now riscaded sizes have been added to the line of Twindow units-display[5], incl. 64/54/715, 90/548/81, 64/548/81, 55/6 xiz, and Ruib. The first four were developed for one to their soils and developed for one to their soils and

# LEFT COLUMN

### RIGHT COLUMN

\_\_\_ Excavation

Foundation -----Plumbing (Rough)

Framing ----- Wiring.

Roofing ----- Trimming.

Flooring ---- Taping.

Sheetrock----- Wiring (Complete)

Lathing -----Plumbing \*

Stucco or Siding ---- Painting

Sidewalk L.Col. R.Col. Front of House Curb & Gutter

DIAGRAM above is a copy of one of progress charts kept on each house under construction, model of which is placed on the well of the builder's office at the site. At the end of the working day the progress of the construction is noted on each chart as the men bring in their reports. The bouse under construction is indicated by a rectangle which is divided into two sections. These sections are subdivided and filled in as the work progresses in accordance with markings shown in left and right columns

in areas that are protected from the glare of sun, such as porches.

In the erection of these houses conventional methods are used. A large cutting shed is maintained adjacent to the office where power equipment is operated by a trained crew that pre-cuts all dimension lumber from a prepared chart. The lumber is picked up by truck and delivered to the building site in a prescribed amount to

complete a particular phase of the work.

Each phase of the construction is handled by a special crew which is confined to doing a single task on each house. This method is a constant challenge to Bonforte to step up his sales to keep ahead of his mechanics. Special crews are set up as follows: two carpenters and two laborers are assigned to foundations and form

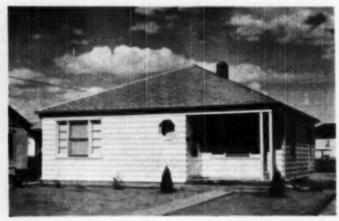


TYPICAL rough froming for window shows spinyed sub-still for trim nating



FRAMING for typical window introduces a sploryed sub-sill on which the regular sill of window frame is placed. Sub-sill provides called sailing for shool and appear

work, two carpenters for floor framing, four for superstructure including roof framing, two for wall sheathing, two for exterior cornice work, two for window and door frames and miscellaneous items and one for laying roof shingles. This gets the house under roof ready for the plasterer and other trades. Building operations are conducted in a manner to keep all work moving along smoothly. Assur-





TYPICAL plan of two hedroom house which has found ready acceptance in this area. Left: one of the attractive exteriors



FOOTER forms for foundation walls are leveled accurately,  $\theta' \times \theta' \times \theta_0$  inch-fluid plywood forms are numbered for re-use without delay. Double 2 x 4 waters, somety's and bracing hold forms straight

ance of a sufficient supply of work on hand keeps the sub trades moving along in line together with the men on the payroll, thus making it possible to complete the houses on time and keep up to a pre-arranged schedule.

A rather ingenious progress chart has been devised by Bonforte to keep an accurate account of the daily construction work done on each house. A large piece of cardboard with the various symbols indicated on it is posted on the wall of the office. A record of each house is kept in the file on which is drawn a rectangle representing the house. As the work progresses the respective symbol indicating its phase of work is filled in on the drawing. In this manner a person who is familiar with the chart and symbols can know in a moment the progress of any particular house in construction on the project. This chart is also of great value to the sales staff of the Bonforte organization, as it keeps them posted on the work in the field. They can accurately advise the purchaser who is waiting to get into his new house the construction progress as of that day.

Materials in the Bonnyville development include: U.S. Gypsum insulated Sheetrock; Johns-Manville asbestos shingles; Texaco and Certainteed asphalt shingles; Curtis storm and screen doors; Andersen doublehung windows; Chamberlain weather strips: Libbey - Owens - Ford glass block: U.S. Gypsum rock wool insulation; Benjamin Moore paints; hardware from three manufacturers-Kwikset, Stanley, and Schlage; Amerak kitchen cabinet hardware; both Crane and Kohler plumbing fixtures; Coleman 30,000 BTU dual wall furnaces: Continental hot water heater, Armstrong linoleum; General Electric refrigerator, range, automatic laundry and electric clock; Telechron door chimes.



ABSISS—Lippman L-bit revidence contin- Georgia Refriguestina (Sir., Yates-Americae Machina Co., Se Init, Wis. For air conditioning arrivage size home of nonlineal cost. Contine operates through duct worth of blower-per warn air furness. Four rows of cooling cells. All air passes through partnerships of the continuation of th



ABBBB — Blactivist range-water hearter. Waldorf Hearter Co., Philodelights, R. Hear contribution has range top consisting of 358-out reacher-bashes, here full-based costing units set in a percession-on-stead fag with 110-woll outliet for teacher or perceivative in best aplaster. In contined in Seculiar water hearter.



ASH016-Erigia-Tuack down window. Storen Windows of Alumbum. Inc., Islania, Chin. Islania in Islania

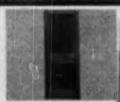
#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABBROS-Transit: Brunger testro meet Co., Inc., Kanasa City, Assas Brusson "lig Cultimaters" was do veloped for use in assembly of all planes, basey modelmory and similar planes, basey modelmory and similar include cofreem accounty of base include cofreem accounty of base long, a very short from and as conste alliamant of all factors



A BRBITN-Homo Utility & Inch saw The Misch & Dacker Manufacturing Co., Toward & Md. Accesseries in clude depth and berel ettachment, ity facts and saw corrying case. With depth and bevol ottachment, saw will col to any depth from 8 to 1-16/1-6 inches, make 65 to 50 depre-



ABISSITS—Curtis Pengsine. Curtis Componius, toc., Ciliates, loves. Es technic precesses repreduces anthroi grain of penderous pine on passes. Usud in Curtis deers and other Curtis veceboars. Made of finaldivided would, If it encopficantly resistant to werping, derinifing an

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AXXXXXXX Swellatur gas-fired ballor. Band Manufacturing Co., 1999burgh, Pa. Operates or all types of faccad-filor but water basting. No. 1837 for natural, mitsed, and reaemfactured gas, has A.G.A. nutport racting of 1,837 square feet of oppirature of 1,837 square feet of oppirature of 1,837 square feet of contralest radiation. Has imput racting of 288,898 8.73.75, por houracting of 288,898 8.73.75, por hou-



ABBBUTh-fivel access panel. Knapp Brothery Mtg. Co., Resements. Other. Hes wide bellife plantw Rungs, blade of gelvenised chain with prime coat of special paint baked on. Special "Knappled" device stores penalties bedding and closing of dear. Fend membra-



ASSESSIT—Unit beater, USS carrier Surface Combastion Carp., Totals, 1, Ohio. USS series may be one with series; may be seen with series; manufactured, misses of LP gens. Was settemetic pile employing new actuating leaves are which deading in conjunction will fan and limit control to preven over-hearing. Assessment to Adia.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



A SMEM—Empi immistive time berip-Clark Corp., Neanah, Wis Haz reflective apperant that protects against lumidity and summer hast in addition to winter inside tim rake. Non-irribating, Stitched ply construction prevents agaging. Five-resistant, Weight outy 100 prounds our thousand source feet



ASSOSTI-Rencho elactric range. Wedinghouse Starthic Core, Mass. Black Citics. Chromo-filtidade stoking in place of conventional and panel in right side gives range appearance of a base-hole deed, provides "luck-wavey" space. Range in 38 inches wide, lass four surface. Cores with. Stewers SOOTH 183.



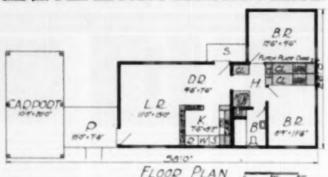
ARRIGIOS -Pullahar, FP23, End Dovit Yanis, Irvingina, N.J. Pullahar weight neity a paesada if mennes, its bristine broches rotate, of the finer, et 5,880 exceletions par minute. A fait buffing ring ediminates over marks. Broch and buffing ring quality inches diameter. Has bose action spring and vacuum prosours.

# Capinet Wall Homes

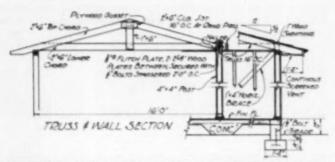
Extensive use of built-ins combined with site-labricating methods reduces costs for Florida builder without loss of quality



SALES price of model house in \$7,275.86. Relinements obtained at additional cost



CULPEPPER house has 736 square lost house exclusive of curpert and perch



SECTIONAL outline drawing indicating relation of alse assembled wood trasses to Fitch plate supporting trans ends. This condition occurs over cabinet-well of moste bedroom. Concrete slab thickness is increased under post or bearing well as indicate

A LOW COST house of high quality was the aim of Horrie B. Culpepper of Tallahassee, Fla., head of the building organization that hears his name. The "cabinet-wall" house designed by Gilbert D. Spindel of Jacksonville, Fla., offered Culpepper his greatest opportunity for reducing fixed coats through the extensive use of built-ins and site fabrication.

Being a raffier practical individual Culpepper was unwilling to venture out into a full scale operation until he had a chance to feel the pulse of the public. A model house was built and completely furnished. The response was more than gratifying as 23 signed orders were received before the model was completed. The enthusiasm continued unabated during the open house and the orders continued to increase.

Capitol Hills, which is now a fully developed subdivision, contains an area of 53 acres. Work started in 1947 and up to the time of the model house, 70 houses had been built. Since then 50 additional cabinet wall houses have been completed or are now in the process of construction. The prototype of the model house is offered to the veteran for \$7.270.66 with a down payment of \$270.66 and monthly payments of \$43.16 for 25 years. Additional refinements to the hase house may be ordered during the construction period for an additional amount.

The fact that this builder's project is close to large lumber producing areas prompted him to take advantage of the economies this situation invited. Being the largest customer of a mill located only 20 miles from his base of operation Culpepper sends a crew of his own men to the mill to salvage the by-product consisting of culls and droppings. These are short members left over from long lengths of dimension lumber that are cut for



CONSTRUCTION view showing wood roof trusses on wall spaced 16 inches O.C.

American Builder, February 1950.



FEATURE of final wall of house is the plywood panels placed between windows which are divided into squares and pointed a deep blue shade. Wide wood shall at all provides space for plants

specific purposes. Culpepper has his crew make up the rough framing unit of doors and windows from floor to ceiling at the mill using the culls for cripples.

The work done at the mill includes corners, tees, studs, floor joists and trusses. These are loaded in an orderly manner for delivery at job to be available to the mechanic as he needs the material. Lumber is distributed around the house and walls are then built on the ground and tilted into position on the floor.

The cabinet-walls that are used so extensively in this house eliminate the need of interior wall construction. These units include in their built-in features articles of furniture that help toward reducing the amount of money required by the purchaser for furnishings. This is an important fact often overlooked by the builder but seriously considered by earnest prospective buyers.

Materials used include JM Rockwool insulation, U.S. Gypsum Rock-Lath, Gold Bond metal lath, Flintkote asphalt shingles, Sherwin-Williams paints, Russwin hardware, both American Standard and Briggs plumbing fixtures, Jet-Flow space heater, Rheem hot water heater, Philip Carey metal medicine cabinet, Formica counter tops, R.O.W. windows, Higgins toilet seats, Pittsburgh Plate Glass Co. glass, and Vulco aluminum screens. M

A SISTEMS—There gas connector, testinallise Corp., Part Jervis, N.Y. A contestillis, building, with female solice of each end, for connecting quanange or climite application. It inches tong. No eachs effects things needed since tabling will form 10 degree effort. Europe can be enough for cleaning habitant tham.



ASSIBILA-Lopfile parkaged fluoring. Concert Lumber and Land Co., Marchfield, Will, Shert length fluoring put up in cardiocert territoria control to cardiocert territoria control to correct to square heef of floor, aliminating figuring of additions for morth and correct costs.



ABBRIDITO—Concrete miner. Chain bett Co., Millouadea, Will. But adjustable Discharge Matte Atlancostelines high discharge feature with teriostable deam milate. Discharge of mises one be obserted to deamne height somparchis high discharge types of mises or column for lammarghery policy.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ABBBB19—Inclined track motorials disvetor. Eing Manufacturing Corp., Chicage, III. King Incline-Track was designed to simplify aicraffing of materials to evirtumes. Manufacturer furnishes pisitions carrier and reaving politiqu; contractor builds was track to length with factors parts and pine lumber.



ABBBITO-Monter-drives one filing machine. Burr Massefacturing Co., Lon Angeles, Calif. Puwer is transmitted from 1/4 H.F. electric meter to filing own by fully-enclosed gears. Filing machesium mores a tooth of a time, permitting as many probas as necessary on any one tooth. Saw has rigid view.



ABB0370 — Prefebricated house National Humas Corp., Lefayatti Ind. Ibis corporation produces two fines of broose: Delass line from two bedrooms to four bedrooms Standard line from two bedrooms (as shown in photograph shown) to the bedrooms. With or without the same of t

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASSESSI--Seastes for Gueile, Pittsburgh Steel Freducts Co., Pittsburgh 39, Pa. Above, warehouse constructed with on of Steelins for Gueile, Seastes In Jacobs and Steelins for Gueile, Seastes In Jacobs with deaths layer of Birrows water-proof paper lacking camendad forgether with a meetic compound.

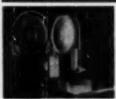


ASTRUM-holidget louver. Midigat Louver Co., 8 Wall IS., Nerveski, Com., Louvers ove made of sluttinorm, completely rost-proof, in sizes from one to four loukes, lostalted by simply drilling hole and loserting unit. No noils or screws needed. Sicrical and seedgad for right archerops. Stop Swages, day roll.



ABINDON—Forced air gas furnace. Lannas Furnace Co., Marshalltown. Index in 168,886 and 388,886 8.7.V. Ingust sizes. Single port type burner is used for sack 68,886. 8.7.V. of ingust. Adjustable for one gases canging from manufactured is URS. It equipped with cluster of the correct of the contract of t

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AE250363--Bandow, Mo. 16. J. D. Walters and Co., Chicage 13, III. Completely enclosed opper wheel goard. Only required sering perform of blade in expense. Built-in light provides spot illumination. Anti-friction guides reduce see blade steel crystallisation. Has



ASSESSION—Equipmen frameless tension screen. Equipmen Wire Cloth Co., Nanewey Re. An aluminum insect wire screen mode on frameless tension principle, quickly installed. Saully stored. Esemovable har attaches screen to top of windows. Bottom har halds under slight feation. Available in many sizes.



ADDISIDE—Four-le-One winter al conditioner, Jackson and Cherch Co., Sagilane, Milch. For gas or oil addition of compensed packeymakes out \$5,000, 100,000 or 112,000 and \$1,10, output foreact to grow with expanding home. Has 12 people hard exchanger, fully automobile controls. Height is \$61 inches.

# Sound Methods and Materials Speed Sales Of Low-cost Homes

Momphis builder includes practical built-into-thestructure features, made possible by close supervision of men and materials



INTERIOR features include quality oak floors and plaster walls. Gas warm-air bouting unit is concealed in living room wall. Above: one of typical exteriors

THE technique of increasing sales-appeal of low-cost homes by offering some features normally found only in expensive housing is being practiced widely by builders throughout the country. Robert Parish of Memphis, Tenn., a strong proponent of the method, found ready sale for a project of 21 five-room \$6,775 houses in which were incorporated oak flooring on a concrete slab, plaster walls, oversized rafters and ceiling joists, roof and

sidewall insulation, 756 square feet of floor area plus 250 square feet of attic storage space, a disappearing attic stairway and other features.

The price of the house includes a 65x115-foot \$1,000 lot. It was built at a cost of approximately \$7.64 per square foot. Parish bought materials carefully and supervised the project closely, taking care that waste and delays were cut to a minimum.

Construction details and floor plans are essentially the same for all of the homes. Conventional methods were followed for framing the roof and sidewalls, which include gables over projecting wings, cut into the main roof, and diagonal bracing in corners of exterior wall-framing for added rigidity. Since the construction crew was well-trained in this type of work, it was done without extra cost.

Drop siding of uniform width



BOBERT PARISH'S Dunmoor subdivision in southern outskirts of Meisphis was begun in Documber. 1948. completed the next May



FLOOR plan shows good shed living room, four large closets. Brugh-Boared offic provides 250 square last of storage space

was used for each house. Stereotyped exterior appearances were avoided by varying the siding on adjacent houses. Widths of six, eight and 10 inches were utilized.

All interior walls are built up of 2x4 studs, with three coats of plaster applied on both sides over gypsum lath. The bedrooms, living room and dining room are papered; and walls and ceilings of the kitchen and bath are covered with one prime and two finish coats of enamel.

Ceiling insulation consists of four inches of mineral wool, while insulating board sheathing, ½-inch thick, provides wall insulation. All windows and doors are weather-stripped.

The floors are select quartersawed oak, 234 inches wide and 25/32-inch thick. They are nailed to 2x4 screeds which are spaced 12 inches O. C. and bolted to concrete slab. A coating of hot asphalt was mopped on the 4-inch-thick concrete slab which serves as a subfloor. Beneath the slab is a 12-inch gravel fill; and between the fill and the concrete slab is a layer of 30pound felt half-lapped and mopped in with hot asphalt. Felt extends to the outside of the exterior foundation wall.

Exterior walls are 9 inches thick, supported by a continuous 8x20inch concrete footing, 13 inches below grade.

Rafters and ceiling joists are 2x6 inches, with the former 20 inches O. C. and the latter 16 inches.

The kitchen has a series of builtin wood cabinets extending three feet high on the wall over the sink and at both sides of it. The floor covering is linoleum. Aluminum screens and frames are provided for all windows.

Financing in each case was with a \$6,000 25-year FHA loan, plus a veterans loan for the remainder. No down payment was required and monthly payments are \$50.



ABSEST?—Purefor-actuated driver. Miline Sofety Applicances Co., Pitts-burgh, Pa. Stud-carrinings country, in Stud-carrinings country, or retaring spring-feeded wifety ore in bandle and pushing troot against makerial, carrinings discharges, forcing stud disch con-



ASSSSSS—blev Tenes Limedrate. Trues Querries, Inn., Austin, Tenes "Random/comin" in gelf face limedrate in two-causes beights. Since this store does not have to be focus of the job citic, the first store does not have to be focus of the job citic, the first that if can be used of cash counter that if can be used of cash counterparable to forms siding. Pre-



ABMINION-Cross "GBC" door operator. H. W. Cross Co., Chicago P., Ill. Operator may remain in tax and open garage door by remain standord. Opera or closs door, drops II of one development of the control of the control

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ARXISMS—Cultoring metantal for concrete. The A. C. Horo Ce., loc., Long Island City, M. Y. Founder, consisting of coloring mediums, lead appropriate, waterpromiting and bardening elementand binders, is used in construction of colored sidewalks. Colored or



ASIB0169—Rax Pij-5 Skipper concrete miser. Chain Self Company, Millineurises, Vill. Incorporate Riss piroted bopper. Rax stationary charging part allows loading of hopper while another batch is in the drum. Non-diagoging, it is mainted above center line of drum. Ince from market of win.



AB300183—Corbin tybular anterior deservory in the property of the property of

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB301-66—Ladon banding machina Midwed Manufachuring Co., 51. Louis, Mn. Makes wood bending enty, acturate and automatis. Low initial and operation cost. Sands phywood, hardboord, Psosible enoge of curved designs stoned unitimided. Fanel is bent by uniform heat and pressures applied at paint of beach.



A8390179—Trumbull hTFF Pasatboard. The Trumbull Blockric blassfocturing Co., Raleotilis, Coes. For excessive of lighting distribution for control of lighting distribution for sform, garages, rasidescess. Had moided phenolic section cantains six complate circuits which prasix complate circuits which pra-



ABSISSES—Aloyalte, light weight transforcest building material. Do O'Mecrow & Ce., South Suts. Colff. For one as Inharine screen, portitions, deligible, green heusen, portion, or wind breaks. Shafterproof, material gambians safely and beauty. Come in large and material commissions and statements.

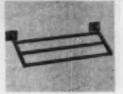
#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



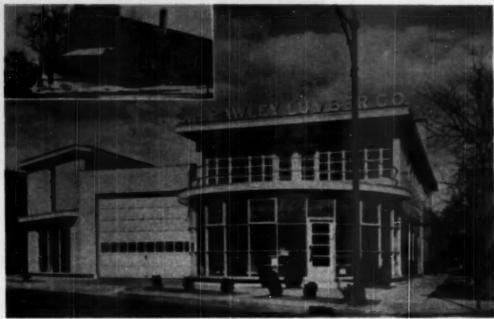
ABBN148-4-0-97 plaster and mutter miser. Siltons Brothers Co., Fredonia, Wis. Meddel crallable with true types of sales. Spring mounted sale is Bi-took fleed width for high speed froiling. Two position sale width can be changed from 30 lectes wide for server docreway. No 90 to, for east trailing.



ASSDIGO - Model 3-55 gazellespowered chain sew. McCoffect Meteor Corp., Los Angeles, Colf. One mon can handle easily. Total ovujet, including blode and chain, 35 pounds. Develops full 2 H.P. Operatos of full power in any poservice or of one people. Two models



A \$19019 — Mail Mark adjustable force rack. Neilidek: Co., Las Angeles P, Calif. Back can be adjusted to any one of three positions straight out, & degrees, or done and file way when set in one. Can be used for attractive good fewel display or far both loved closure. In the supplemental to the provider of the straight out.



CONTRAST of old coul new buildings suggest success of Puwley Lumber Co. New building has two showrooms; one at last for millwork

### **Keeping One Step Ahead of Builder Needs**

Operation of one of largest lumber firms in Wabash Valley, directed by a woman, is characterized by neutness, local confidence, enterprise



MANAGERS and assistants of various yards of Pawley Lumber Company are shown above assémbled at dinner meeting. Pictured are, treat row, left to right: Mrs. Elsie Pawley, John Bussing, George Dinkel, George Nagel, Lee Elliott, Clyda Brown, J. Harold Passett (studiest), Rear row, left to right: Richard Allen. Fred Bussing, Dean Callahan. H. D. Ward, Howard J. Bollinger, Bussell Butcher, Russell Crowder, Leslie O, Taylor.

POR the past thirteen turbulent years, a woman has guided the affairs of the Pawley Lumber Company, Inc., of Terre Haute, Ind. Immaculately clean yards, spicand-span stock arrangements, and fresh paint are testimonies of the feminine touth. Exemplary employee relations, eight fine lumber yards, a growing volume of business, and the newly remodeled general offices are proof of the success of this womanly tutelage.

Mrs. Elsie Pawley took over the management of the Pawley Lumber Company after the death of her husband, Stephen H. Pawley, in an automobile accident in 1936. The organization was originally founded in 1893 when the first Stephen Pawkey and his son, D. H. Pawley, purchased a lumber yard in Dana, Ind. Shortly thereafter, Stephen H. Pawley, son of D. H. Pawley, became a member of the organization, eventually assumed its leadership, and expanded the business to include a total of seven yards throughout the Wabash Valley region of Western Indiana. Another yard, formerly owned by the Pierson Lumber Company, was added in 1943 by Mrs. Pawley.

The policy of the Pawley Lum-

her Company has been built around the idea of service to the contractor and consumer. Broad, central alleys and easily accessible stock in yards encourage pick-ups from these plants. The warehouses of the yard shown above were rebuilt at the time of office remodeling.

Two draftsmen are regularly emplayed by the company. Their services are at the disposal of contractors and potential home owners. This company does not engage directly in construction. However, it works in close cooperation with local contractors to whom it directs possible customers.

The new building shown in the photograph (top, left) houses the general offices and the local office of the north Terre Haute yards. The semi-circular section was especially designed to utilize the acute angle portion of a trapezoid-shaped lot without distorting the rectangular pattern of the rooms. The glass used in this section was manutactured by the Pittsburgh Plate Glass Company. The overhead door which also enhances the facade of the building was manufactured by the Overhead Door Corporation. The general contractors for the office building were C. H. Garmong and Son, Terre Haute. The sheds were constructed by Fred C. Libbert

The first floor rooms of the office building are equipped with indirect fluorescent lighting, 34-inch acoustical tile, and asphalt tile flooring. Second floor rooms are decorated with varying colors ranging from dubonnet to cream. One of the rooms on this level serves as a reception room for customers. An automatic hoist has been installed in this new building to facilitate the removal of cinders and refuse from the basement.

The company does build hoghouses and similar small farm sheds during winter months, especially. Since the company operates two mill shops and employs two full-time carpenters, the construction of these small buildings insures a year-round supply of work.

Evidence of success under Mrs. Pawley's management is afforded by the volume of business done. In addition, the number of persons employed has increased from 37 in 1936 to the present total of 67. The organization operates a fleet of 24 trucks.

Each one of the eight yards is under separate management. As a consequence, each yard is equipped to meet its local demands with a fair degree of understanding.



ABSBIST—Portable A. C. electric generating plant. B. W. Ohan B. Sone, Inc., Minneapolis, Melon. Plant 1,380-well plant provides ownigh power to run feat-working, cost-colling tools on swary job. Provides sizectricity for lights, grills, pleases, plant-threaden and other equipment. Drives by secolism engine.



ASISSION—Lett Translander meterials bandling mackins. Left Marte factoring Co., Milmospaulis 4, Minn Ulfs and transparts leads up to 30,889 persons. When Efficial, Jack saturating at 65 degrees brancageind ground to act a stability on. Hydraelic jochs retreat left truck bedy when material is located.



ASSISTANT "Viptro-liner" lodder oftrackmed, Anderson Products Co., Fulara, Colff. Andreaetically corrects useren ground conditions and provides meaninum salety. Affecties to all types of ladders, wood or neeted, chieglet or filored book. Teloroccupic steel tabling enhancelizable adjusts to width. Lightweight.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABIDI-68—Figure-Mahed Poproll Tise Indeas, Rapid Office Derices, Inc., Chicago 2, Ill. Compuths official withholding tax, new 1998 Social Society tax of each singleyes in one operation. Indea consists of finpartip-centrolled official on which charf for whichever payed period costi is moustled. Feet, simple.



AB360:00-Redio Model No. I automatic 9-linch vestifiating fas. Sharles Mannistorting Co., Pittiburgh 12, Fe. For battli-in installation is small rooms where wall space is limited, Becommanded far province rooms, Michansetes, Battlinoons, Built to fit all standard condition. Permits our installation.



ABBOId5.-Weatock marking as marking god ast. Westwood Moreoschering god ast. Westwood Moreoschering God, Lin Angeles, Ciel XII cassists of nacessary chicols is marking and marking and marking fatch fired and strike plates. These, in presentance, exclusit builders to restinct to bur and films recessary to lens took set. Crisisti fearond from the

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AESSEIS -- Lean-to type futbolar cleat ladder. Ell-Jax, loc., Arch-botd, Ohio, Uest consistent of 8-foot base section having 6-foot spread, one 6-foot and one 16-foot ladder and 3-foot head which affords plank rest spece. Entire ladder unit can be easily assembled or dismanifed in a marker of a very five seconds.



ARTH007-Type U-draft cantrol for opace hashors, floor furnoces. Sketfile Mondectering Co., Berroll 3.
Mich. Works on herisostal or vertical floo pipe. To change from horizontal to vertical, removes odposting not, sight constravaight from horizontal to vertical stud. This deat only is built into floor pipe.



ABSMBH -- Pan-sis Duo-Faol ste plav. Faorhaner Corp., Chicago 15 10. Can be carried convenionts in pocket. Leaght, 5 inches. Weight 1½ conces. Madds 168 steptos. By compressing elapting mechanism II will fairs II 2 sheets of paper as accurely as two. Flastic borrel comes in 8 colors. Can is at chroms.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AERSSH-Ash jill gas conversion burners. Handley-Brown Haster Co., Jackson, Mich. ASSA Sinde under futual requirements, burners applying with other council or rest burner hands for reund or rattangular futuacies or builder fireposts. Cypacity of each burner ranger future for the council of t

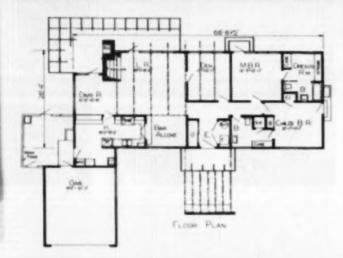


A \$25000—Enciosed bucket elevator for use with flavou-compariment Bin-Botcher. Coophrotino Machin-cry botos Co., Waterieo, Ioma. Controlled from ground level. Self-cartoriled from ground level. Self-cartorile droit codematically splends whon feeding aither and bin. Can load from domp truct links begger. Valid's capacity per lesser, 48 from.



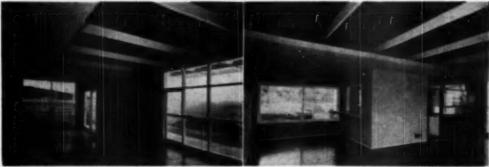
ASDIGNI—Cabinel model hundiflor. Walton Laboratories, ion., trologhes II, NJ. Both lengts and displies models can now be shiftened in alther waters or bloode molegany grain. Units are automatically controlled and evaporate between 5 and 10 gettons of water into air new day.





# **Special Features** Add to Appeal Of Modern Home

Small architectural details combined with bright colors make this an attractive house, both inside and out



142

ATTRACTIVE color, ample storage space, adequate advantage of a site, and good small architectural details are commendable features of this home. Built for sale in Brentwood, Calif., it is offered at \$29,500.

A feature of the home from the front is the open canopy extending 18 feet from the wall of the house, resting on a brick retaining wall at the edge of the lawn. The 2x10-inch framing members are painted white. To the right of the entrance is another framework of 2x8's, on 24-inch centers, five feet long. Above them is a 2-foot overhang which goes across the entire front of the house. The front is stucco painted gray except for the boards and batts on either side of the door. These are white. The garage front of boards and batts is also white. The low pitched roof is covered with white gravel.

The massive front door is five feet wide and two inches thick and is weather stripped. To the left of the entrance is a guest closet with sliding doors eight feet wide. To the right is a similar closet which houses the water heater and furnace. Other storage space includes a wardrobe closet in the large dressing room near the master bath, two walk-in closets in the children's bedroom, additional wardrobe and closet space in the dressing room which is combined with the bath.

Over the living room, roof rafters are exposed giving a studio living room effect. The plastered portion of the ceiling is painted yellow; rafters are stained green, and walls are gray. Above the 2x10 roof rafters are 12-inch tongue and groove boards, also stained green. The 2x7 stringers below are five feet apart and extend to the outside of the house to form the pergola.

Construction was done by Burke & Wyatt, local builders.



U-SHAPED kitchen has yellow wells, green calling, yellow und gray rubber the floor



AESISSA—Sun Vertikal Blinds, Sun Vertikal Sales Co., Grand Regids J. Mich. Sapareste strips that from louvers of bilad are made of Celebranes Modificand. Made in wide remps of colors. Buth febric touver is removable for washing. No windings or leading. White the control of the colors in the colors of cords with concealed control or cords with concealed control red. Compres 60/071 as



ASTRONO-Koreneal cove display, bloson-Blobus Corp., 198 Fifth Ave., New York Is, N. Y. Far deal-ex, compact display with two-leath defectabilit legs for use on sales floors, in windows, or on wells. Unit footroes company's estire florouses core line of nine different color compiles and eligibles color compiles of time, some base.



ARRESTOR — Radion's barrhoard United Takes Radion's Cope, the Issuit as, Mich. Beeling perceits complete, permanent installation before tetting and ploteduring to eliminate temperary heat rand to winter construction. Unite res in distinct when chuft are in plotes from high perceit are in plotes from high perceit and familia dering perceit and construction and dering perceit and construction.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ARRENSA—Bilco metal Cellindoor. Billock Area, Nature Avenue A. Cann. Made in either copper-dreif or aluminous. Available in three standard state. Provides direct rouch to beasement Mahas possible future leastfation of bullsy equipment in becomment, including deep treaser unit, basing equipment, oil shoreage testis.



ARIBORO—Lamidall. Service Prodocts Dir., Weodall Industries, Inc., Chicago 16, III. Haw playlic-lamicalled panels of Yampared Massanite Prestivodo base and pigatic surface which resido heat, moleture, abrasion, and impact. Unaffected by water, scap, berusegae, cammon prirowsts. Veriety of caleurand sizes. Service BOOTH 181.



ASSIGNI--Basch plant Searing. E. L. Bruce. Co., Missignitis. I. Tean. Fre-finished cath Souring to other seas widths with plead in volunt page. Designed for reach-other season. Has Bruce scratch bed field in medium dark, medium "Decorator" shads. Strips are 75, and 75, looks wide, and plantager (E/22).

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



A876000—Slimitine, Jr. tuminaire. Edwin F. Guth Co., 2815 Washington Are, St. Louis J. Née. Flehrer designed for use with 4- and 8feat Single File Slimitine temps. Admit 43 per cent of light up and 57 per cent of light down. Nea few brightness louvres and carder reflector. Louvres hings to oillier side. Top enclosing plates optimed.



ARISSIPP-Gkil tuck pointer, Skilcev, Inc., WED Earlen Are., Clitego Mr. III. Designed to spead up removal of old marker be tween bricks and 6th on tuck pulsiing jobs. Light in weight. Duch fight switch and protected mote for trouble-free performance. Wheels or protected by church querd. Used with standard discs.



ASISSIS - Stopell veterproofing Stepell Veterprofing Makesfective rev, Inc., Kalemason, Mich. Water proofing made in the types to concrete, wood, leather, testiles and masonry. Liquid certier is which collide and preservatives howen disordered peesstrates on exceptorities in the collidered peesstrates on exceptorities leaving pore-sealing motifies as infectional seat of ematerial motifies.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB3098 — Magno-Level, Buckeye Plastic Cerp., 1239 Haron Bd., Clovaland 15, Okio. Frame of allay atuminum with Alatico permanent magnets. Stricks to round or flat surfaces at any angle, leaving hands free. Clinck-faced ongle gauge with grantly zeedle determines angle to 360 degrees. Size to 100 certs. Waighs 10 outnets.



A500367—No-Shot safety duples receptacle. Bell Electric Co., Chicago, III. Has built in order copy shick externatically closes settled when not in use. For connection plug process, inserted into order you openings, ore used to turn cap or process can be pushed in; cap returns to closed prediction whose plug is resourced from coditar.



ARTIGISE—Long fibre rack wool batts. Johns-Mannelle Sales Corp., New York 16, N. Y. Long fibres produce more certifiest batts that spring to fell thickness offer compression. Fibres ron parallel to tength to prevent capping, May be easily out with balls or are. Metile in two thicknesses, 65 or 33 londes wide. Shawes BOOth! 15.

# Advertising and the



# Recession? Depression? ... Nuts!

CINCE we opened three weeks of age, over 25,000 persons have visited Constituental Ridge in River Ridge, N. J. They came despite devergeme or wilding least, despite the myth that this should be a stack time in real citate. Must important of 30, they came despite meanthing oftent on alleged recention or dire for events of commonity dishrums.

The 25,000 were a wide cross-neutron-homewises, prehensional men, reckins, hashessen, clerks, basis-nessen. In the last yea and me. We talked with those people. They said nothing about no offugal recommer a passeble deprension. On the constrary, they were cubardy confident, fully ready, able and willing to confurdable the long-torm fluoresial responsibilities of home overcriping.

These people didn't talk about consense bagers. They told on instead, that they were tired of deathfling ago with in-hum, or of joing couped up in these two ages resents, so of rearing their children in dream, or in probable or children in dream in might be the death of the third or their thirds.

They made it cloky that they were roady to invest, it forky, are real value for a feel price. They daw, just that at Continental Ridge. We are selling at a clip that gives the horse-lough to the mongers of recussion and depression. In fact, the 600 canchety at hoster at Continental Ridge are being guideled up to feat that hand horse the first front continents the management of the parameters. In a feet front continents the parameters we will be sold out.

There's real value in beyry orable factor of the truly consusal rabagh-type horses at Continuousal Rabagh. It's reflicted in the company, time-realizing construction. It's critical in the company, time-realizing construction. It's enhanced in a wealth of brilliant features—like a wealth of brilliant features—like a member there will be a rehusent from and Trany obsishes cord side and state subject as but made the walls, floor and festures; floor-according window-well excellenting a rear pairs, nor-conditioned horst, and on array of other between the body

There's read value in the heartifully lambenped plots, 79-100 or larger. It stands out in the 8 distinctive exterior davigns that seargineerachs and garagems. It's soulphasized in the hearty of the sloping reserved products. And it's underlicated in the heartine—only 15 minutes from the Caurge Westingson Bridge and 38 minutes trees Times Square.

After you see Continental Ridge, you will agree that the price in fair-up An into a 5Hz a month ourser the usual charges on the 2-budroom home in \$1,000. The 3-budroom home in \$1,000 mag. There is no down payment for vederand, but extremely easy terms are available-log non-version.

Roal value for a fair price. That's what we're strucing at Continental Ridge. That's why we can give a remainding "Note!" to these who would make much ade about note sathings or recovering or depression.

ontinental Ridge

A project of the Eaple Contraction Company
Kinderhomeck Road and Howland Avenue River Edge, N. J.

Elements by Ear. After arranging the Energy Radiospace through rate though the date code legal as their four-end flocil. Framework IV. Tons capt as their legal date proceed one throat as humbrished floud flores control. bit is 16-bit for the code in section (section).

Dr. Der. Tulle No. 11 bering Luffer Der Buckland Conden: Ause Non-Luck onto al Conseg Workstagen Bridge on Horsbead Lucino. Disco Euge. EDITOR'S HOTE: This advertisement, associates by Town Adverticing Associates of Machassack, H.J., was published Aug. 1, 1949, in the New York Times and New York Harald-Tribusa. It brought not more than 8,000 persons. It is reproduced here as an example of what Mastre, irving and Grassman believe a good display advertisement about development homes should contain.

DRAWN by a highly skilled artist, this illustration is prominently featured to catch the reader's eye and also to acquaint him with the type of home being advertised. Dramatically highlighting architectural features and setting, the picture is calculated to give the reader a highly positive impression, thus preving the way for his acceptance of the copy's message.

PROVOCATIVE hoodies, embracing unusual thame for real estate advertising, is intended both to attract notice and pique reader's curiosity so he will read rest of advertisement.

LIBERAL use of white space, not only in margins but between lines, paragraphs and other segments of the advertisement, provides contrast, another device for compelling notice. It also heightens readability and lends diquity.

PORMAY is simple yet attractive, suggesting strength and diquity. Advertisement is characterized by absence of crasy-quilt pattern that gives much real estate advertising cluttered appearance and discourages readership.

COPY. on supposted by headline, devalups umasual theme, exploiting what was them a question of extremely wide interest, even concern, to virtually everyone. Treatment represents adaptation of lournellatic technique to advertising. Bityle is anappy and convincing, with obsence of everworked, buckneyed words and phrones that weaken credibility of real astate intel other types of advertising.

SMARTLY decigned signature, composed of simple elements, is intended to impress identity of builder-developer and his protect on reader's memory.

WRITTEN mainly for New York audience. directions by our and bus are clear and precise.

#### Home Builder

By William G. Irving, Samuel S. Grossman

Town Advertising Associates. Hackensack, N. J.

THERE is a big flaw of omission in the old adage that the world will beat a path to the door of the man who makes a better mousetrap. To be wholly true, the adage should add:

1. If it is simply but forcefully explained why the mousetrap is better.

2. If clear, explicit directions to the door are given.

 If the maker of the mousetrap is properly identified.

No product—whether the most ingenious mousetrap ever contrived or the finest house for the money ever built—will evoke public demand unless the world is told about it. The process of telling consists, for the most part, of advertising.

Advertising is an art demanding training, experience and a high degree of skill and talent. The place to look for these qualities is in a recognized successful advertising agency. A recognized agency is one which has met credit, ethical and other requirements laid down by various publishers' associations. To determine whether an agency is recognized, call the credit or advertising manager of your nearest daily newspaper.

#### Care In Scienting Agency

The builder, in selecting an agency, should exercise the same care as he does in choosing his lawyer or physician. Friendship, or family or social considerations, should play no part; the choice should come not from the heart but from the head. To gauge an agency's effectiveness, the builder should:

 Ask the agency under consideration to give him a list of its clients.

2. Ask each of these clients to rate the agency on (a) originality in copy, layouts and art; (b) attention to the client's particular (Continued on page 224)



AERBISS - Steeple Jock pertiable chingle coffee. Northwest Steedard Products, 1680 Quincy NE, Minnapolis II, Minn- Can be disped on any two roung of ladder or mounted for chationary use. Will sat subscrive thesis or any type mading. Bade is cold refled, believe armend. Millis mark for Multi-



ASSISSO-Bollcocks, Sijer Co., Feed City, Fe. In two desiges, anti-ciphos unit (6-80s) and require unit (8-90s). Morbing perh of two types are interchangestic. Has belanced pithin, nego-action closing, althrift sing, standpipe of red matel. Will work in teach of any mate but expecially Sijer. Sievess BOOTH 41.



A BRIBBIN-Gas range. Perfection Stove Co., Claveland, Obite, Acam G-inch deline range has valid-light smoleless broiler with chromo-ptoted grid. Plans is drawing stove below broiler and gelf-out conting chart. One glast and filters descicated burners and benqual-closed over. Own has sittled and filter.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



AB19319—Window fax, Seco-Lite Manufacturing Co., St. Look, McCook Seco Window Fami of exhausting capacity at high speed is sufficient or cooling and vanificating a threat he few-room home during account outlines weather. Fan he also equipped to serve as stondard oir



A 859030—Tehnier tock, Yale and Towns Manufacturing Co., Stamford, Com. Vole steaded tehnier lock has minimum number of park and is packaged for golck leadlation. Fits both right and left hand doner without everying. Designed in six medals, in all standard florithes, for all bouse doner.



A \$20075—Thatcher gas-freed Hi-lewinter air candilineer. Thatcher Portance Co. Gerwood N.J. Sine 42,800 55,998 and 19,308 \$7.U.'s file register. Factory commbinwith all controls. Adaptable is four collers, monther bases or beamention type homes. A.G.A. on proved for liquefield physicisms proved for liquefield physicisms.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ABSBITS—Triwall sink American Radiator and Standard Sanitary Corp., P.O. Sen 123s, Firstburgh St. Pa. Triwell sink is equipped with a special perbage container between doubte compartments. Unit permits effortiess perhaps disposal at counter-top with no beading or cheecing. Surveys BOOTH'S SI to 64.



A\$25076—Thermopene double-glass onlis. Libbey-Oweno-Ford Siless Co., Toledo 3, Otilo. New unit contrib of an order light of hear obscribing plots glass and inner light of regridor politibed plate glass, separed for politibed plate glass, separed only for the contribution of polar online Compress SOO(TH 63.



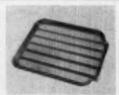
ARREISS — Overhead Penelroy leading with. Buy and Night Div. At fillated tion tigulgeness, fee, Monrowis, Calif. These heating units have no fees to force air circulation or drafts. Heating is done lengtly by infra-rod radiation, May be used for apol heating. Allows

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW

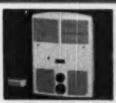


A \$20030—Nine-cubic-food freeze.

Kerlinsher Dire, Nach-Edelinsher
Corp., Setroit 12, Milch. Hes storege capacity for up to 310 possible
of troops foods in cheel-free volleed steel cabinet. Finished in white
build-on anneal. Unit is 1915,
inches feet, Servens 80007H I.
inches Sevens 80007H I.

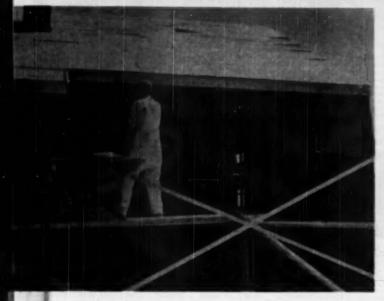


ASSESSY—Save A-Sint. Cincinnet from Fence Company, 200 Research Ave. Cincinnet's (Dillo. Alpenium tray makes a divinitioned out of Rel-topped cloths. Products cloth tops and drains water from filet top surfaces. WIII one scatch. Bubber feet give proper till. Size: 19 z lé



A \$190376—Saf-Aire wall forcace, blooded \$91-14. South Wind Div., Thewart Warner Corp., 1610 Proper IV., Indianapolis 7, Ind. This is a convector type seal heater with "advely-saaled" combustion chamber and completely sealed ventor bor and completely sealed ventor bor borning all types of gas. Usel or diseases at Barrens \$60,000 to \$100.000 to \$100.000

#### Low-Cost Homes in Reinforced Stucco



BR GANNER BRANCE BRANCE

FIRST cost of Pertland comean stacce is applied over steel reinforcing wire that is hald be inches out from side of wall by special furring noils. Another beliefs cost of stacce will be applied, followed by two costs of comean paths:

FLOOR plan, left, of house above was used in all house in the 24-house Leo M. Stiey project completed in Detroit

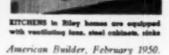
SALES of homes in Riley project were about of completions. Below: group of the 4-room homes priced at \$8,185 Homes, built with new type exterior wall construction for Detroit, find a ready market

USING stucco exterior walls, strengthened with a special type of steel reinforcing wire, offered something new to Builder Leo M. Riley, of Detroit, Mich. That was one reason he was anxious to try it, plus the fact that homes incorporating this type of wall construction had never been built in the Detroit area. In preliminary planning for a low-cost home project, Riley thought he could make cost savings in wall construction, and convert these savings into extras that would add sales appeal to the homes.

In three and a half months, the Riley organization completed 24 homes incorporating the method, and Riley says his planning proved right. He reports enthusiastic acceptance on the part of home buyers—the homes, completed in November last year, were sold before completion—and he plans to build more homes with reinforced stucco walls this year.

Part of the savings made in a sales price of \$8,195 for the 4-room houses went into extra tile for the kitchen and buthrooms, a kitchen ventilating fan, select oak flooring, steel cabinets and sink in the kitchen, steel windows,







LEO M. RILET

polished brass hardware throughout the houses, and for venetian blinds. Full basements and 48x110-foot lots were included in the sales prices.

The homes rest on 8x20-inch footings placed below the frost line. These support 8-inch concrete block foundation walls. Diagonal 1x6 subflooring is used, over 2x8 floor joists. Joists, 2x4 studs, and 2x6 rafters are placed 16 inches O-C. Interior walls are load bearing. Metal trim is used. Roof covering is 210-pound asphalt shingles over 1x6 roof boards laid tight. Blanket type cotton insulation is used in walls and ceiling.

The stucco walls were made by placing a layer of building paper and 25/32-inch sheathing directly on the outside of the studs. Over this, Keymesh reinforcing wire, made by Keystone Steel & Wire Co., was placed. A special type furring nail holds the wire 36 inches out from the sheathing. Over the reinforcing wire, a ½-inch scratch coat of Portland cement stucco was applied, allowing it to embed the steel wire. After this dried, a second ½-inch coat of stucco was added, then two coats of cement paint applied to complete the job.

SRANDED PRODUCTS USED: Plumbing Fixtures, Briggs Manufacturing Ca.; shoothing, Calatas Corp.; Daster bardware, National Brass Co.; Fonestra stool windows, Detroit Stool Products Ca.; roofing, Flinthote Co.; Kaymesh relatorating wire, Raystone Stool & Wire Ca.; Laxaire gravity furnace, C. A. Olson Manufacturing Ca.; metal trim, Milicor Stool Ca.; Youngstown sabinate and sinks, Mullies Manufacturing Corp.



ABBIDISH—Adjustable shall invelte. Eximan and Georger, Buffato I, II.Y. Treats suitable for all calling and overhead work of pleaterers, measure, accustion! contractors. Canadas of two rigid vertical shall supports with diagenet brazes except with diagenet processes to hold the word beam common to hold the wood beam.



Addition—Fluoreccient lighted believes achieves. No. "W" renies. F. Nr. Lovens Ga., Cincinned 4, Obio. Available with framelias mirror filliphone or with stabilisms of mirror frame. Single cellut against achieve the particular action of the contract frame. Single cellut against achieve the particular action of the contract for signification cellut for electric came, but dry along the contract for the cellular single cellular actions.



ASCRETT-Model IS-C Waper Impactor. Waper Impactor Isola Ch., Colombia For Impactor Isola Ch., Colombia Ch., Colomb

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABMISSO—Stanley Interior residenfield stiding dear bardware. Na Spanley Works, New Britals, Conn. For single or multiple dears with a without portiest. V-shaped track reduces friction to a minimum. Clamping occur on diginately track occurs perfect alignment of door with jamb. Outs, any installation.



ASSID-160—Aughties caphalt Searing tile, thredde Seck Aughteit Cu., Ses Anteolo, Tassa. Highly resistant to afhatis, alcoholoi, grasses, and milks actif colorisms. Billibuth to deat a mar. Wide selection of through and through marbolosed bess. Tile is aspecially adapted for lostelistion over any concrete subfleor.



A&BB065—Citippes holds. Citippes Monnfacturing Cu., Earnes Citip Ma. Holish and externatically us toads virtually any material. Qvid ity and easily set up to any prefit on scaffold or percept well. And matic unheading feature eliminatic need of man on the scaffold. And matic critical carriers of matic releases and communications.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASISDISS—Obympic handspill sidling. West Coast Stained Shingle Ce, Sastlin, Wesh. Netwest wood product has ropped character, heavy shadow line. Cut by hand from satisting of the lines in thickrun from IS to 15/6 incline in thickness. Lengths vary from 6 to 16



ASSOIR -- Robber-coat Skid-Less floor onemel. The Wilbur & Williams Co., Beeton IS, Mass. Cleanical and gasoffino resistant. Dries in one brow. Insequentive and high by resistant to wear. Prevides tough, sading production for besoments, police or garage application. Se



ASTRIZZY—Loc-cell. E. G. Bullding Feathers: Corp., 181 Fack Ave., New York 17, 16.Y. A nell of 55 or 6, Inch stainless steat which is drivon like ordinary nell. Automotically cliniches Itself. Its fine point prevents meterial displacement. Radiat bending at back for positive cismojing pillows size vertations.

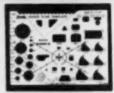
#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



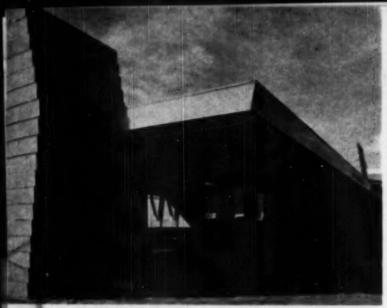
A \$20000 -- Mabili Air compressor. IEA-888. Ingersoll-Rand Co., Nav. York Q. N.Y. Dissel engine. Periodic Starts early, and offer their warmup period is diffiled to full dissel operation by means of a single laws. Regulater cleves greed to compress (set anough air to held considered anough air to be set of the compress (set anough air to be set of the set of th



A239386—Habo Pioor Planner. Offered to Habo asphalf tills dealers by Hackmaister, Inc., Pithbough, Pa. Stands table high from floor. Conformer can crosses ministers def-inch binchs of actual Habo orphalt till flooring into pathware and color combinations to sell his teates. Full range of colors.



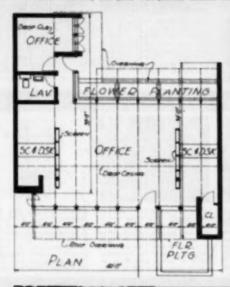
ASSIGNA—Timely house plan template. Timely Products, Bus 20s, Columbus 9, Okio. Pleatic template with die celturis for alectrical and plumbing symbols, door serings, mouldings and gathers. Road pitch genge included. Precise actions to 1/s-inch acade. Other templates on available in different exclusion.



PYLON. overhang and glass wall provide unusual boat detail

### Modern Office At \$8.78 Per Square Foot

Commercial building of individual design is constructed at low cost through unusual use of conventional materials







PLAN to for our large room, with screen on each slide of large counter offerding two somi-private offices. Above: Overhang estends to interior, verying ceiling height

VIEW from front emphasizes bracketing effect of two dominating pylons. Concrete blocks are painted gray. Low operate will of planting area conforms to the horizontal lines of building

148

WHAT E. W. Gilland, owner of the Valley Escrow Co. in Southern California's San Fernando Valley, had in mind when he planned a new office building was a structure which would combine striking design with low-cost construction. Gilland's ideas were put into practice by John Lautner, Hollywood designer, and the result was an efficient, modern office—built at a cost of \$8.78 a square foot.

Located on a heavily-traveled thoroughfare, Ventura Blvd., at Sherman Oaks, the office attracts much attention from passing motorists. An unusual effect is offered by two large concrete block pylons which bracket the nearly solid glass front wall.

The pylons are built of reinforced concrete with a facing of concrete blocks. The vertical reinforcement of the pylons continues and becomes part of support for wall footings.

The plan is arranged so that the two side walls are solid masonry. Walls facing street and rear lot are composed almost entirely of glass, with supporting double mullions spaced four feet apart. These mullions in turn receive the roof and ceiling rafters above. Rafters are cantilevered out to form canopy across entire front.

The low canopy across front, with an underside of corrugated aluminum, extends for about eight feet into the office. Height of ceiling beyond canopy is raised, with appearance of greater height also emphasized by exposed ceiling rafters. Interesting lighting effects are made possible by different ceiling heights.

Free use of exposed interior structural members, both wall and roof, not only add to rugged effect of structure but also serve as means of reducing over-all costs. This type of construction is particularly conducive to rapid construction because of elimination of interior finish.



EXPOSED calling rathers and double mullions, and concrete blocks painted gray help from natural, raqued interior. The



ABBORN—Draffies contiliation violate of the part and force of the force and force and force and force of the force of the



ANTIONIS—Asheutes diffing and shingic coffee. To do the Building Mahericle Co., Part Worth, Isaac. Big Chief line of nother are membertured in two less, 25-lock bleek length volgiting appreximable; 25 presents, and 25-lock length, cheur 25 presents, and 25-lock length, cheur 25 presents, their contings are made



A ESSESS-Heavy-duty truck. Chevrolet Moter Birdsien, General Michael Birdsien, General Michael Google, Datrell, Blitch Heavy-duty Cherrolet stake truck in 1985 line has a let-line healestkenn and accommodates foed of more than five tens. Medigi has 12-hast pint-form, is widely used in all types of haulies. Proct line has 30 certs.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ABSMIT — Frencher, Construction Products Corp., Les Angales, Culif. Profit Frencher la counted on Cara tractor. Has effactment for localization of city affect reaction. Dischar to depths of more than 48 inches to width of from 12 to 12 inches. Equipped with eight forward forms of the conference of t

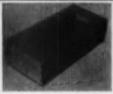


ABB009 — Cham brick, Bafrell Brick and Stock Ca., Dafrell Id., Micels A.S.I.M. grade SW specifications for quality brick. Hard, olica-base brick high temperature and high pressure cored in aufactores. Has high marker affinity. Amerage compression break point: 810 payands pressure size.



ABMETN-Dols thermostelic of costrol. Dole Yahre Co., Chicago 12, III. An autometic individual room temperature control for henne using forced worm of heating content instrument includes a thermostal which automobilishing operates naive of especially designed as naive of especially designed.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



A23Mins. Weste Thrif. I sheel becoment window. Vesto Sheel Products Co., Inc., 20 Colonado Arv., 86-falo, New York. An economy model window of rigid riversed construction. Made from but rolled sheel. "I cections. Possible to apon half-way or fully. Firm size makes beamment screen and a storm said.

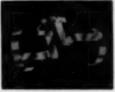


A\$30007 — Aluminum chem windows and chost residence casements. Caco Steel Product Cerp., Chicago 19, 191. Caco chem windows are manufactured of specially designed extruded aluminum sections, glocal with double strongth glass. Have rubber weathering sail and vaniliation. Savans BOOTH 101.



A836391—Formution, hand sculp fored real divine usil finish. The formutions Co., Baltimers 33, Md. For new construction and resourtion of softeniors and interiors. Applied over any corface—chicogists weather-lead, botch, stock, clinical birock, or concrete block. Fran-

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ASSENS—Gen-Bi Safety Reurescent lamp quards. Bun-Bi Equipment Co., Hilliada, H. J. Provide protection against pseubility of falling Reurescent lamps in continous ran, and/o-and lighting instaltations. Tracted recilient retrail. Can be sprung aside for relamping.



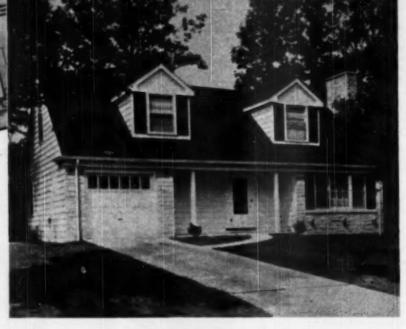
ARBBISI-inst-Colina, tire-retarding cotton inestation. Sprine Sedding Manufacturing Co., Taylor, Fanas. Available in versatile types to meet most inestation needs, incinding open face, fully enclosed and reflective. Lightweight neet to handle, and install. Long leading material found descenting effects



ASTRONS-Velvel Gio, Chica Gio, specimentad paints. Flash-Kuta. Inc., Clavuland, Olio. Permit and matching in celer of walls ament matching in celer of walls and wasdward. Packaged under bade name of Patietium, time' vastabile oil paint. One cast own oil well surfaces, including states brists or cames, wallsages.

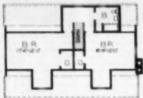
### From Rendering

#### **To Finished Product**



RENDERING and So m (Above) of this designed by Rudulph A. Matera, New York architect, first appoured in American Builder, April. 1949

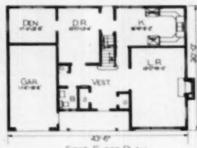
COMPLETED home. built by H. R. Jucobson 6 Co. ler Mr. and Mrs. Fred A. Clurk in Ar-lington Holghia, III., on It appears today, right



SECOND FLOOR PLAN

Originally appearing as a rendering in American Builder, this home, now in completed form, fills a home owner's needs

VESTIBULE and hallway on first floor permit easy access to all rooms, as floor pion, left, shows. These areas also add appearance of greater size to down-stairs rooms as illustrated by the living room directly off hallway (Below)



FIRST FLOOR PLAN



American Builder, February 1950.

LARGE centrally located vestibule and hallway permit easy access to all rooms in this home. Any room, upstairs or down, with the exception of the den may be reached without walking through another. Though the vestibule and hallway occupy about 16 per cent of the total first floor square footage, more than the usual amount in a home, the owners and architect felt the value free circulation added to the house was well worth the use of space for this purpose. The home, designed by Rudolph A. Matern, New York architect, was originally presented in the form of a rendering and floor plan in the April, 1948, issue of American Builder. Because it could be adapted to their needs as well as oriented to a deep corner lot, it was selected by Mr. and Mrs. Fred A. Clark, Arlington Heights, Ill., and built for them by H. R. Jacobson & Co., local builders.

Exterior of the home is a combination of Lannon stone and cedar siding on the front, and cedar siding on the sides and rear. A sheltered entrance to the vestibule and garage is achieved by recessing part of the front wall 4 feet 6 inches back from the edge of the roof. In front of the entrance, a flagstone walk, laid in concrete over a gravel fill, blends attractively with the Lannon stone on the front of the house.

The home, as originally planned by Matern, offers a good opportunity whereby a builder can complete the four downstairs rooms, and leave the upstairs portion to be completed by owners when they choose. In the Clark home, two large attractively finished bedrooms and a bath are accessible from a U-shaped hallway at the head of the stairway. Ceilings and walls of the entire house are well insulated.

A full basement is provided. The 10-inch poured-concrete foundation walls are waterproofed on the outside, and rest on 10x20-inch concrete footings. The concrete basement floor, 4 inches thick, is placed over a 4-inch gravel fill. Floor joists are 2x10, 16 inches O.C. Over 1x8-inch diagonal subflooring, 15-pound felt is laid, then 1x2-inch strips, topped with 13/16 select oak finished flooring. Floor joists, 2x4 studs and 2x10 ceiling joists are 16 inches O.C. Interior wall covering is lath with three coats of plaster.

Storage space consists of one closet on each side of the vestibule, a closet in the downstairs hall, a walk-in type wardrobe closet in the master bedroom and in the spare bedroom, a linen closet in the upstairs bathroom, and ample kitchen cabinet space.



ARMSDM—Bantley-Carrier Wastherchits Grossow Wild, Stanlay Block Inic Teods, New Britain, Comn. For grossing tops of distors to exceedmodelaw seather: ptrings sash baiances. Hes one H-P, mobile, Willia coffee farefulled, will cat a %-look grossow as 6 feet facility width.



ARBISIS — Miscomber light deal fruscos. Macember, Inc., Contos, Obio. All parts of trus roof spream ore callable. Bottom chard previous socrar salling for celling lath which may be although a with large lead roofing ands or offser specified with celling material. Wingoo in forming design, speed.



ASSECTI-Lamco Manumental Secias 2) astroduci shemioson visidovo. Crotti Steak Praduchi, Isac, Jamestave, N.Y. Provida veelfastion letura di operater bandle for ast typo building, and are adaptable for uchaulo, office buildings, hospitals, fine residences and ether phrochems. Surveys may be used

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ARRIONS -- Geometric band save Geometric Sav Crt., Inc., Auburn, N.Y. Does the work of a regular hand sav, sorface locialism tool sav, control of the control of the control private of the control of the congravaters. Meanufacturad is two croscout medicin, eight touth to the lack and 10 feath to the lock.



ARSERT - Folding aluminum ave logs. Bon-del, loc., Bestrop, Tusta Fazisat tren in- or cetolde. Of permanest heavy gauge aluminum can chrection. Variety of caless arbaled on. Fire-, rain- and wind proof. Louver design stots out me rays, admits differed light. Remain



ABBIETO — Puri A-Pump cinctripipe threading tool. Yer-I-de
Sales and Engineering Co., 1945
Grand Siver Are., Detroit 23, Mich
Threading tool for one with Bidgid Other, Nye, Toledo, and Beaver distenits, calentaire on on with ear
on hand cincte. Capacity: 15, to 1
fauth pipe. May 15 81.P. modes

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



AESSES - Wet grindstones. Boliza-Crame Co., 946 Caefred Ano., Toledo A. Otto. Peripheral speed remains constant as wheat wants due to self-adjusting friction drive that also attendants countershaft ball. No water-general in oneded. Tool read is 25; 1 S inches, permits grinding earlies from 8 to 38 decreas.



ABJECT4—Coorment window openother. H. S. Getty and Co., tox., Philadelphia 60, P. N. Nr. 1986 operator for aluminum cosament sail has die cost aluminum bousing and crank bandie. Arm of elitoy. East operation assured by angle drive worm and spec design. Has selfworm and spec design. Has self-



ASSETN-Vani-iov. William Schench and Co., text., Stream City, Na. A combination cabinat lavatury and vanity medic in two units. For use with any brand of plumbing fishers. Of herdwood construction with based exament finish in berige, greygroom, or light giver. Counter tops fluidad in Militarts. In two resions.

#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASSB00—Bethroom cables! Needand Steel Cablest Co., Chicage 61, 55. Spolpped with adjustable side microx. Model 1586. See 1625-inch dop-noirne with 5625-inch sidewing microx. Cablest Interior is 13±19/j. Inches. Contains three shalves. Requires well opening of 0428/j. Inches. Plate gioss microx.



ABBOTH.—Forest hard beard. Forout Fiber Products Co., Forest Grove, Ore. New beard for walls, callings, table tops, partitions, and other uses, made from Dauglas Fir Himber. Uniformly produced to rasist chipaging, breaking, cracking, and dearling. Immorth surface for fluids by opening, beating, broating.



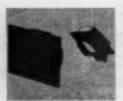
ASTBIRS!—No Gord automatic dom bothom. Macklasteurg-Bucque Co., Olddhoma City, Okta. Deer bethom silvow fall wearthership section to roles and to claser carpets and roge automatically when door is opened Provides colid contact with floor when closed. III, 16, 42 and 46-inct lengths. Made of rest-proof mostlengths. Made of rest-proof most-



ASPIGITO-direcceptor. J. A. Zuro Mfg. Co., Erle, Fa. A. grease in-text-plier that superative gifesse from seals weller through principle of fineahrlim. Ferforated beffler plains quiet valver, permitting grease to coperate and rise to confect for resecued. Available in varied size for commence of the seals of the seal of the seals of the seal



A \$3500%—Gue. There: gas floor furnace. Due-Therm Dir. Motor Wheel Copy, (anxieg 1, Mich. M. 1988 B.T.U.-Inger. 237), Inch over-all depth. Materprovided to within 19 inshes of floor. Vented. Egustians burson. All-is-one control. Available with Sud-Well register. Colling discussions 2016. (SM) in the Colling Statement Survey. All-is-one control. Available with Sud-Well register.



A£550000—Finaptace ask dump and cleaned door. Superior Finaptace Co., 1700 E. 59th 52, Los Angeles 21, Calif. Ask dump occupies space of one finalinist, of 12 people space of one finalinist, of 12 people patential filips. Cleanaud filips. Inches. that patentials filips. Cleanaud filips britishes or stamped dwell, O.3. 95/pr/\$6 inches.



A BISCOBE-Westel bitches ventilitors. Western Appliance Co., Inc., 55th Grand Brow Ara., Seinolt & Mich. Sidewall model available in 8 and 6-lock sizes for any wall thickness. Has mirror thick can deminen grill, industries motor, outside one-piero cast aluminem shafter with spenge rubber seal.

#### BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



ARRESTS—Jiffy combination ofcome and cerean window. Angel Nevelly Co., Pitchburg, Mass. Yearful wood to used. Lever storm soft is thread in upper helf while screen sach is or as in lower half in the aumment, in cold weether, screen sach is for the upper half while lower storm sach is count of the condition of the condition of the cold in upper half while lower storm sach is used, Low cost.



AEMOSS—bildiget elegior for RNy jobs. Spood Products Co., Leng bland CRy, N. Y. Albent the disc of a package of gors, stepler binds sy fa heastly sheets of paper and corries 18 sheples to a locating. You may be used for teching paper, leether, or cloth. Made of chowns floibled steel with plastic top.



ARTIGUED—Rolling garage dicor, Model XX. Wagner Mfg, Co., Ceder Falls, Iowo, Made in ten standard sisse ranging from fisify feet, Doors are made of top qualify white pine. Headroom required: If is inches; special 6-inch headroom door available. Has flooring hall beering track rollines.



ASSSSS—Freetitie aluminum vindows. Fleet of America, Inc., 119 Pearl St., Buffulo 2, N. Y. Doubha, double-hung, and picture windows on illustratural in developing. Spongarubber strip bashind wasther strippermits removal of window for wooking or registering. Screen end chrom sosh timiliarity removed.

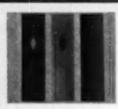
#### BUILDING PRODUCTS ON REVIEW-BUILDING PRODUCTS ON REVIEW



ASSISSE-INCW-MB and All forcits. General Motors: Carp., Posifics, Mich. Beat drive. Middle relight range. Great frective shiftly. Stretoud capacity for of-file-highway lead are module to GMCs. 190 of to new module to GMCs. 190 of let may module to GMCs. 190 of let may be seen to the letter of lett



ABSSITE-Dynamatic door closer. New Segland Mig. and Supply Co., 42 Cherch St., New Haven, Conn. Designed to allminate maintenance, adjustments, oil applications. Will confroid only laterior door earlieshing from 15 to 176 pounds. Sealed against dist; not affected by temperature changes.



ARXINFM—Shartwas, Castrael Divicion Corp., 201 N. La Salla 51., Chicago I., III, Shardiwood debters are made of Mil-Sinch Masentha Vempared Présidence. Willhors come in two langther. 54 and 60 inches, both are 14 inches vide. "In-coeff factory-disched.



A826466 — All-engle heed drill.
Commins Business Machines Corp.,
Chicopa 48, III. 386-degree engle
heed ertachment for Vy-leck capacify drills gels at "flight spots."
Will 61 are Vy-leck cap. Drill
equipped with model 318 Jecobs
check. Head quickly removable.
Housing grosved to 61 hand.

#### AMERICAN BUILDER READER SERVICE COUPON

For further information about any Products on Review, write serial numbers of products on blank lines and mail coupon to:

> American Builder Readers' Service Dept. 79 W. Mource Street Chicago 3, Ill.

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### TECHNICAL GUIDE for Builders and Craftsmen

#### **Correctly Proportioned Footings for Homes**

THE soil under footings behaves in a manner very similar to that of an elastic solid, even though it may be slightly plastic. Up to the yield point, settlement will be nearly proportional to the load. In other words, a loading of 2000 pounds per square foot will cause a settlement twice as great as that caused by a load of 1000 pounds per square foot. Also, as with elastic solids, when the load is removed a certain readjustment, or recovery, will occur. The yield point of the soil is the point at which the settlement (load ratio) appreciably increases. Above that point the amount of settlement is entirely unpredictable, and, for tested soils, the safe loading is generally assumed to be 1/2 of the loading at the yield point. In the absence of tests, a safe loading of 2000 pounds per square foot may be assumed upon almost any well drained inorganic soil.

In very few cases is the soil pressure under the footings of residences so great as 2000 pounds per square foot, When the dead load only is considered, the soil pressure under the footings of an ordinary two story frame house, with both floors wall-hearing and the usual 12-inch footings, is usually between one-fourth and one-third of that amount. In accordance with the theory of elasticity, even

DISTRIBUTION of londs: A-one-half real lood, dead and live; one-fourth calling load. deed; wall load, dead; one-lourth first load, dead and live.

one-fourth ceiling

dend: one-ball

tribution as A A - ONE-HALF roof load, dead and live: wall load, dead, 8-

some loads as A

load, dead; partition

first floor load, dead and live. C-same dis-

A - ONE-HALF roof lood, dead and live: rellies. dond: fourth second floor load dead and live: fourth Brat Spor load med Brez 3-one-holf sec and floor coiling load dond; one half second floor load, dead and live: one-half first floor load, dead and live: partition load, C-same distribution as A

with soil pressure so low some slight settlement is inevitable, for the settlement (loading ratio) is constant,

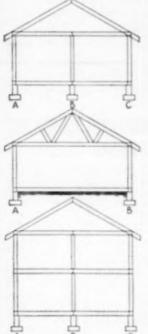
The correct design of featings does not necessarily consist of simply providing wide bearings; for though settlement may be minimized by so doing it may still be smeven and destructive. It is more important that the bearing area of footings he proportioned to the loads they carry, for then settlement may be equalized at all points under the structure, and the effect of such settlement minimized. Provided, of course, that the bearing soil does vary in nature or consistency at different points. A muck hole, a pocket of quicksand, or an out-cropping of stone or shale, can cause serious complications. A large boulder allowed to remain in its natural bed in a footing invariably causes trouble. Take it out, and fill the depression to the bottom of the foosing with good gravel.

In most residences and small business buildings the entire roof load, that of the upper stories, if any, and the first floor load, if the floor is of standard joist type, are borne directly by the side walls, with the assistance, probably, of a central longitudinal wall or a joist-hearing girder. The end walls support little if any dead load excepting their own weight, and practically no live load. Although some obsolete city ordinances arbitrarily specify a certain width of footings for such cases, such provisions may usually be interpreted to mean minimum widths, for certainly there can be no valid objection to increasing the width of the footings at points of heavy loading. Special consideration should be given to interior footings, for center walls or joist bearers may carry 3/2, or, if the joists are continuous, up to 14 of the total floor load. Proper proportioning of footings should not be difficult under such circumstances if the actual intensity and distribution of the live loads can be determined.

Special consideration should be given concentrated loads. Footings under chimneys and fireplaces are almost invariably out of proportion with the footings under the structure proper. Unequal settlement occurs within a few years, for evidence of which we have but to look at the unsightly cracks in the plaster around the chimneys and fireplaces in practically 100 per cent of our homes over five years old. Chimneys and fireplaces usually are, and should be, practically free standing, with no increment of live loading. In some cases, however, the loading is decidedly eccentric, and care should be taken that the gravity center of the load coincides with the geometrical center of

In houses the actual intensity and position of live loads are always more or less unpredictable. It is necessary to provide for a 40 pound per square foot distributed live load on floors if they are to be strong enough to withstand possible concentrated loads such as stoves, pianos, refrigerators, et cetera. This live load allowance would amount to 7680 pounds upon the floor of a 12 foot x 16 foot living room, where actual live loading will probably never exceed 34 of that amount. In a 12 foot x 12 foot bedroom this

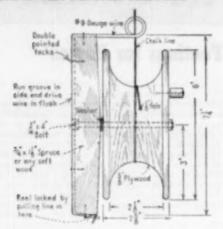
(Continued on page 170)



American Builder, February 1950.

### TECHNICAL GUIDE

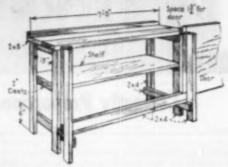
#### **How to Make a Reel for Chalk Line**



THIS reel will conveniently hold 200 feet of carpenters chalk line. The line can also be rewound as rapidly as the mechanic can walk. The wire loop at top of reel, through which the line passes before being rewound, prevents line from becoming tangled or knotted. Line is locked in position at bottom of frame as shown on drawing. When purchasing a new line obtain a package of cotton dye and color the line. It will then last longer.—Submitted by J. G. Caldwell, San Mateo, Calif.

Let your suggestion pay you five dallers (\$5.00) in cash. This sum is paid by American Builder for each short cut or job pointer that is accepted for publication. Seed all material to Architoctural Editor, American Builder, 79 W. Moorco St., Chicago 3, Ill.

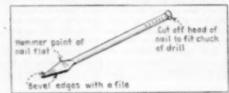
#### How to Make a Table for Planing Doors



A TABLE for planing doors can be built easily and quickly on the job. The extension, which is built integral on one side of the table, is constructed with a continuous slot for holding doors tightly in position, while edges are planed to fit and for installing hinges on side rail of door. Top of table is handy for placing tools and other material required as well as the intermediate shelf.

—Submitted by John Shular, Bristol, Conn.

#### How to Make a Home-made Drill Bit



AN altered finishing nail or other type nail may be successfully used when a drill bit breaks and replacement cannot be immediately made. The nail selected should be approximately the size of the bit required. Nail is then placed on a hard surface such as a vise and the point is hammered flat. A file is used to put a bevel edge on two faces of the flattened surface. Cut off the head of nail so shank will fit tightly in chuck of drill. Nail will not break and is less expensive to replace.—Submitted by Herbert A. Ruedeke, Park Ridge, Ill.

#### HOW TO DO IT . HOW

#### No. D-64 . . . Multiple Use Sliding Table

THE photographs and drawings of this month's Better Detail Plate illustrate the design and construction of a sliding table and "pass-thru", a feature that is growing steadily in popularity.

The pass-thru is particularly well adapted to houses of functional plan and design and houses where rooms serve a dual purpose. In this house one end of the living room also serves as a place for dining. The architect in this case has designed a table that is easily moved into position in living room, the portion that protrudes serves as an end table with drop panel at counter line closing up the pass-thru opening; the remainder of the table is in the kitchen. When extended into the living room, the table seats four people.

The dish cuploard above the table has doors that open

into the living room and kitchen. Submerged in the light shelf extending across the living room wall above cupbeards is a down-lite of disorescent tubes that lights the table below Remainder of dissing room is lighted indirectly from tubes in light shelf.

In front of the corrugated glass panels on the adjoining wall are open shelves, with one section enclosing a silver chest. Shelves are open at both sides, causing the books to stand out in sharp relief against the smilight. The natural finish of the birch table, cupboard and open shelves is thoroughly in keeping, and provides a pleasant contrast to the striated redwood plywood surfaces of adjoining walls and the soffit of the light shelf.

The measurements given on the detail plate and the construction methods are suggestions. They necessarily will vary, depending upon conditions.

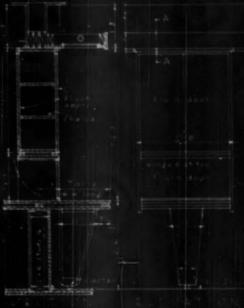
Data courtray of Douglas Fir Plywool Association, Tacoma, Work,

### AMERICAN BUILDER'S BETTER DETAIL PLATE

Detailed by R. J. Alexander for American Building

NO D.64 - MULTIPLE UZE ZELPING TABLE



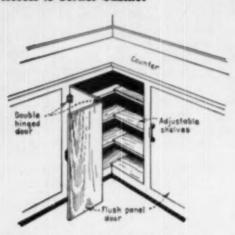








#### How to Obtain Free Access to Corner Cabinet

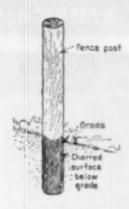


WHEN kitchen cabinets are placed at the intersection of walls, the area below the counter line often becomes difficult to get into because of its extra depth.

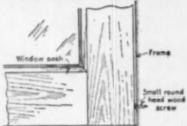
The sketch above suggests a method that will make this space more accessible through the elimination of the conventional corner vertical frame. A vertical frame member is placed approximately 12 inches on each side of the intersection with the top horizontal frame member acting as a cantilever over to the intersection. Adjustable shelves are supported by lapping one over the other. Double hinged doors provide easy access to cabinet area.—Submitted by John C. Shanholtz, Winchester, Va.

#### How to Prevent Wood Posts from Rotting

WHEN building a fence or anything where posts are required, this builder has the submerged portion of the post charred in preference to creosoting. He builds a small fire on the job and subjects each post to the flame until it is well charred. This method has proven effective against rot .-Submitted by John Menkveld, Grand Rapids, Mich.



#### How to Stop Rattles in Window Sash



WINDOW sash in old houses that have become loose in their frames can be quickly and effectively stopped from rattling by placing a small roundhead wood screw into the window frame next to the sash. This takes up any side play caused by space between the window sash and frame. If the rattling is excessive, a screw can be placed on each side of the frame.—Submitted by Roger Isetts, Kenosha, Wis.

#### HOW TO DO IT . HOW TO DO IT . HOW TO DO IT . HOW TO DO IT

#### No. G-4 . . . Store Modernization Details

THE PROBLEM: To stress two floors as major selling and display areas and to tie in the second floor display windows as an integral part of the store front.

To make the second floor window as prominent as the main floor show windows.

To create a warm and inviting effect with the use of stone, shrubs and natural wood on exterior and interior.

SOLUTION: A maximum amount of store front area devoted to glass and the use of materials generally found in the construction of homes.

MATERIALS AND COLORS: The door jamb, wood between second floor windows and sign background are red oak with a natural finish. Perma-stone facing of piers to represent structural piers for the support of building above, finished in three or four shades of a grayish lavender. Floor and bulkheads are red verona terrazzo with white Portland cement and red color pigment added to gain brilliance to floor and to complement colors in piers.

The interiors of show windows are covered with "Marbalia" wallpaper in aqua and gold marbleization. Curtains on second floor behind windows are gray ninon. These operate on tracks concealed in criling and can be operated from open or closed position.

CONSTRUCTION: To obtain an open, all glass effect, new steel beams and uprights were installed at second and third floor levels to receive floor construction. Awnings were omitted from the front of this job and sun shades were installed in show windows. This makes a neat appearing front at all times of the day.

Sign letters are porcelain enamel, set on pins free from the red oak sign background. The portion of the front wall above the sign background was left undisturbed and the entire wall up to the coping line was painted a light chartreuse color. This color had sufficient value to make the store a bit more prominent than the adjoining buildings, and yet in no way detracted from the store front area. AMERICAN BUILDER'S STORE FRONT DETAILS

Designed and Detailed by Losis J. Glaskin for American Builder

IPG 4-STORE MODERNIZHHOU DETINGS



GERSTENFELD



### APPLICATION FACTS On Red Cedar Shingles

OUTSTANDING features of Certigrade shingles, the Bureau, are their high crushing strength, durability, light weight and low rate of expansion and contraction with changes of moisture content.

Well-manufactured red cedar shingles have established an excellent performance record in roof applications where exposure to weather is greatest. They have also proved adaptable for economical use on sidewalls,

#### Roof Application

Shingles are suitable for use on all roofs that have sufficient pitch to insure good drainage. Certigrade shingles may be laid with the standard exposure (covering 100 square feet with four bundles) on roofs of not less than one-quarter pitch. The standard exposures for 16-inch, 18-inch and 24-inch shingles are 5 inches, 5½ inches and 7½ inches. On roofs with less than one-quarter pitch, the shingle exposures should be reduced to 3¾, 4¾ and 5¾ inches respectively.

For example, instead of laying 16-inch shingles so that the distance between the butt lines of the shingles is 5

#### Covering Capacities of CERTIGRADE Shingles

Including the Number of Square Feet Covered by Four-Bundle Squarex and Single Bundles for Exposures Given.

| Engagene | States             |                     | Eightee             |               | Twenty few auch<br>Shingles |                  |  |  |  |
|----------|--------------------|---------------------|---------------------|---------------|-----------------------------|------------------|--|--|--|
| Englises | 6 Bundle<br>Square | Close<br>Bluesellie | 6-Bussile<br>Square | One<br>Bundle | 6 Bundle<br>Square          | Chos:<br>Buesdie |  |  |  |
| 216      | 79                 | 1796                |                     |               |                             | 914              |  |  |  |
|          | 80                 | 300                 | 76                  | 17%           |                             |                  |  |  |  |
| 416      | 100                | 2216                | 80                  | 20            |                             |                  |  |  |  |
| 4        | 100*               | 28                  | 902                 | 22%           |                             |                  |  |  |  |
| 516      | 110                | 21)4                | 100*                | 26            |                             |                  |  |  |  |
| 6        | 130                | 363                 | 108                 | 37            | 863                         | - 20             |  |  |  |
| 614      | 130                | 3014                | 117                 | 29            | 90                          | 2214             |  |  |  |
| - 1      | 140                | 35                  | 137                 | 31            | 90                          |                  |  |  |  |
| 714      | 1150               | 27) 6               | 3789                | 34            | 198*                        | 25               |  |  |  |
| 8        | 260                | 80                  | 145                 | 365           | 106                         | 2614             |  |  |  |
| 814      | 179                | 4719                | 1154                | 36            | 213                         | 28               |  |  |  |
|          | 186                | 4.5                 | Zw.E                | 85            | 130                         | 30               |  |  |  |
| 914      | 190                | 6715                | 81'2                | 42            | 8.27                        | 3114             |  |  |  |
| 10       | 300                | 558                 | Int                 | 46            | 133                         | 83               |  |  |  |
| 3014     | 220                | 87%                 | 1165                | 67            | 1.60                        | 35               |  |  |  |
| 11       | 230                | 8.0                 | 3180                | 80            | 147                         | (86) (4)         |  |  |  |
| 1116     | 220                | 8716                | 2519                | 8.7           | 1158                        | 38               |  |  |  |
| 12       | 1200               | 64                  | 218                 | 54            | 346                         | 40               |  |  |  |
| 1256     | 111                |                     | 8.07                | 87            | 188                         | 6714             |  |  |  |
| 13       |                    | 411                 | 236                 | 58            | 172                         | 4,3              |  |  |  |
| 1314     | -                  | 450                 | 348                 | 81            | 163                         | 45               |  |  |  |
| 16       | -                  | -                   | 1854                | 6.5           | 2.606                       | 8634             |  |  |  |
| 1616     |                    | 44.0                | 4.12                | 211           | 282                         | 46               |  |  |  |
| 15       |                    | 44                  | 441                 | 41)           | ,700                        | 88               |  |  |  |
| 1004     | 111                | 111                 | 2.17                | 444           | ,7696                       | 82%              |  |  |  |
| 16       | 101                | 114                 |                     | 621           | 2242                        | 5.0              |  |  |  |
| listy    | 100                |                     | 1.1                 | 41.5          | F1.5                        | 100              |  |  |  |
| 17       | 1                  |                     |                     | 1             | 811                         | 354              |  |  |  |
| 18       |                    |                     |                     | -             | 1                           |                  |  |  |  |

\*Maximum exposure recommended for roads.

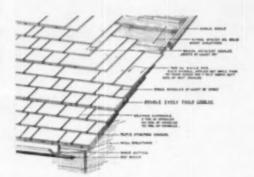
\*Maximum exposure recommended for single-counting on side walls

inches, this distance should be lessened to 334 inches. With this reduction of exposure, four layers of shingles are assured throughout the roof area. As an example, if it is necessary to lay shingles on a porch roof of one-eighth pitch, it is good practice to choose 18-inch shingles for this purpose and to lay these 4 inches to the weather.

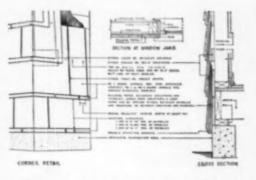
While shingles last for long periods on steep roofs, the exposure cannot be increased beyond a point equivalent to the length of the shingle minus one inch, divided by three. In all roof construction there should be three layers of wood at every point, to insure complete freedom from leakage in heavy rainstorms.

#### Sidewalls

In new sidewall construction, either tight sheathing or spaced sheathing is used, although tight sheathing is more widely accepted. In mild climates, however, sheathing spaced apart on centers equal to the shingle exposure and shingled with red cedar shingles provides a very satisfactory and inexpensive wall. Building paper should be used with such construction, either between the shingles and sheathing or between the sheathing and studding. Not only is spaced sheathing satisfactorily used on residences in mild climates, but it is also effective for use on certain types of garages, implement sheds and other structures where protection from the elements is a major factor.



RED CEDAR shingle four-ply root. Resi offers both protection and beauty, with double courses penducing deep shodow lines.



DETAILS of red cedar shingle ribbon sidewall application

Buts and illustrations through courtous of Red Color Shingle Buress, Seattle, Wash.

#### Old Man Winter

never bothers

#### **RO-WAY OVERHEAD TYPE DOORS**



Will the garage doors you specify run the risk of being frozen shut...blocked by snowdrifts...jammed by frost-raised floors?

Not if you specify Ro-Way Overhood Type Doors! With Ro-Way it's always fait weather—because:

Snow's no problem. Even with a heavy drift against it, a Ro-Way glides right up. No need to shovel snow for door clearance.

Won't freeze shut. "Icing Up" is another worry Ro-Way owners just don't have.

Frost-raised floor con't jam it. A smooth-rolling Ro-Way lifts right up—or snugs right down to the level of the floor.

Wind's no huzard. Huff or puff, wind can't blow open a Ro-Way Door-or bang it shut.

Unoffected by moisture-swelling. Even if jambs or sections become moisture-swellen, a Ro-Way still operates smoothly, easily.

Rolls up-in-end-overhead—out of the way. Always protected from the weather when opened. Inner surface never exposed.

So let Old Man Winter do his worst—he'll make no trouble for Ro-Way Doors. Or you—if you specify Ro-Way for all your residential garages. \* ROWE MANUFACTURING COMPANY, 764 Holton St., Galesburg, Illinois.

\*Also evallable for commercial and industrial installations.



Only 2½ inches of bandroom! That's all our Madel 21 requires.
 Write for details now.

Nationwide coles and installation service. See your classified telephone directory for excess and addresses of Ro-Way Distributors.





There's a Rollay for every Doorway!

#### The Personal Touch

By R. E. Saberson

SALESMEN, front and center? The next step in the demolition of the once great housing shortage will consist of an all-out demonstration of efficient, personal salesmanship . . the weakest link in our distribution chain—the tie that connects but does not bind the ultimate consumer to any particular industrial product or service.

Despite the fact that we are doing right well in our round-the-clock research laboratories and that the fertile brains of our inventive geniuses never cease working, it still takes a personal contact to complete the final sale of the products that emerge in ever-increasing quantities from our streamlined factories.

Were it not for this fact, there would be fewer furrowed brows showing up under the receding hairlines of our leading industrialists... be they manufacturers of better mouse-traps or builders of the dream houses of tomorrow.

#### Sales Must Keep Pace

The unadorned facts of the matter are that the great majority of American concerns are far more skilled in production than in distribution. Only a rare few have the ability to step up the efficiency of their sales organizations to keep pace with their constantly increasing production schednies.

While it does not apply with equal force in the housing industry as in most others, there is in effect in America a tendency which comes close to being a mania . . We must produce X per cent more goods each and every year than in the preceding treely-month period, Unless all concerns, big or little, great or small, can spin the wheel just a little faster year in and year out, they are "losing ground."

This dubious policy of continually increasing supply regardless of demand leads eventually to over production simply because we do not have the ability to step up consumption at the same rate as we speed up production. Until we reach the time when we can do so or are willing to let well enough alone we may be sure that we shall get into trouble sooner or later.

Nineteen-fifty will mark the end of the profit trail for many a concern that has mastered the problems of production but has not been able to do the same thing in the distribution end of their respective businesses. Already we detect signs of distress in the frantic price appeals now appearing in the daily papers.

#### Price Reductions Not the Answer

Strange, isn't it, how we turn to price reductions in an effort to stimulate demand, when in most cases, Mr. Ultimate Consumer regards the slash as nothing more than a signal which tells him to wait for more and bigger cuts that are almost sure to come?

"Drastic reductions" actually are two of the acariest words in our distribution lexicon. Nevertheless, they are used with careless ahandon in all but the comparatively few cases where the policy is to stabilize the price structure rather than to upset the apple cart.

Naturally, there are many who will insist that "everything is two high" and that the only modicum of relief will be found in substantial price reductions. Unfortunately, such a situation invariably is accompanied by a drop in earning power. We can't have our cake and eat it too.

All of which takes us back to our original premise. If we are going to keep on hiking our production schedules we must make corresponding improvements in our distribution facilities else we will eventually be in bot water.

Now distribution is made up in a large part of personal salesmanship, the human touch that causes the ultimate consumer to put his signature, firmly and confidently, on the dotted line. The big job ahead lies in the area of human relations the ability to bridge the gap between the final seller and the man who is to adapt the finished product to his own use.

No method of bridging this gap by other than personal contact has ever been invented. Mail order houses claim to have come close, but the last remains that there are many human beings involved in each transaction who can gum up the works in a manner that will result in the permanent loss of customers.

The far flung housing industry will never be blessed with any substitute for personal salestmanship. It, or any great mail order house, will never be able to apply the catalog technique on the point where houses will be sold successfully by correspondence. Future competition in the housing industry will not come from this direction, but the struggle for the order will be none the less severe through the lack of this source of supply which has waxed powerful in nearly all other lines.

The absence of such a threat, which plays a leading role in the whole distribution picture, does not spell easy going for the housing industry. It merely means that the job of selling must be done personally—something that is far more difficult than the development of a printed page of unvarying efficiency which will do its stuff effectively in the distribution of certain items.

#### Personal Selling Important

It is the housing industry's dependency on the personal selling that constitutes its major problem in the highly competitive days to come. So far, the going, since war's end, has been comparatively easy. The emergency rush in which anybody could sell anything that savored of shelter homes at lower prices. But eventually a good house at a satisfactory price will have to be backed up with quality selling in order to insure a profit.

Nineteen-forty-nine was a good year, and the housing industry came down the house stretch in a burst of speed that smashed practically all existing records.

It would be just as sensible to assume that such speed can be maintained indefinitely as it would be to assume that a Derby winner can keep right on going round and round the track indefinitely at record-breaking speed.

How long can the home building industry keep up the pace? Nobody knows the answer for sure. But of this we may be certain. It now is time to shift some of the emphasis from production to distribution . . . from building homes to selling them. America is producing as it never produced before in industry after industry. As competition for the consumers' dollar grows noire intense it behooves the home building industry to look well to the efficiency of its salesmanship for it is the quality of the personal, final touch that will play an increasingly important role from here on.

### lodern Personalized heating tor modern apartments

IN AKRON

PARKVIEW APARTMENTS, South Howkins Ave. The Hendrick Hall Harter Company, Builders and Operators

Photograph shows part of Park-view Manor consisting of 17 buildings housing 98 suites. Last

word in modern conveniences, individual Gas-Fired Janitrol Winter Air Conditioners provide personalized heating for each family unit.



are antremely compact, clean and ear acception. Some type with ore offer installed in closely or halfways immedi glady adjacent to individual apartments



HIGHLAND COURT APARTMENTS, Typical of Several Multiple Units built by R. C. Dowey, Inc.

Isnitrol Triple Service Systems are exclusive equipment with this builder. Efficient operation and low maintenance costs influenced Mr. R. C.

Dewey's choice of

Janitrol for servicing 200 family units. Providing convector radiation with forced hot water circulation, the Janitrol units also supply hot water for all domestic



One compact Junitral Unit supplies h water for hacting as wall as for dall household hot water needs. Units as also widely used for redient pohasting systems, either gos or oil fire



#### 27 APARTMENT UNITS, North Cicero Ave. E. L. Anderson and Company, Builders and Contractors

These ultra modern apartments reflect typical Swedish architecture. Each building containing nine apartments is serviced by a Janitrol boiler providing a forced flow of 200° hot water. Each apartment is provided with a thermostat control for both the convectors in living quarters and small cast iron radiators in bathroom and kitchen,



sitral Cost Iran Ballar with put of 486,000 b.t.u./hr. Foread had water system is maintained by continunus pump operation.

ME-TESTED

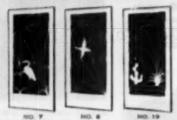
TIME-PROVEN

GAS FIRED WINTER AIR CONDITIONERS - UNIT HEATERS GRAVITY FURNACES . BOILERS . GAS AND OIL FIRED TRIPLE SERVICE HOT WATER SYSTEMS

Complete specifications on typical Janitrol installations for apartments, industrial and commercial tions for apartments, mountain and communication buildings and homes are available in A.I.A. file folders. Send for your copies today, there's no obli-

Builders Service SURFACE COMBUSTION CORPORATION, TOLEDO, OHIO.

### ORNAMENTAL IRON









#### Here's How to

### BEAUTIFY

Any House At Low Cost!

Small homes can be "dressed up" with real "eye appeal" and distinctive charm for very little money with

### SCREEN DOOR GRILLES

Makes beened more attractive, eacher to sell. Puts on the finishing touch of beauty that appeals to women. Also cause the acreen, clrengthene the frame.

#### STOCK DESIGNS As Low as \$15.00"

Domite the high quality of these handwrought free grilles with their forge drawn points, graceful lines, and heartiful spirals—they are standardinated for contemp.

#### STOCK SIZES For All Doors

Simple to order, just rheck dimensions of your face and dimensions of inside covers questing. Cirilles are available in sloves since for all stack single panel, two punel and combination shows desire. Information on special sizes sent upon request.

Write Department AB, P.O. Box 1113, for free catalog of designs, sizes and prices.

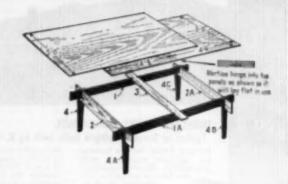
Manufacturers of the Original "Complete Builders Line" of Hand-Wrought Ornamental Iron

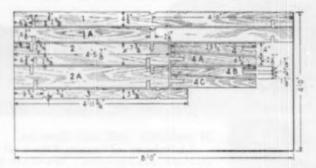




#### TECHNICAL GUIDE for Builders and Craftsmen

#### How to Build a Utility Table





THIS all-purpose plywood table is of regulation size and height for table tennis. It can also be put to innumerable other uses depending on whether it is to be used indoors or outdoors. When purchasing material for the table tell the lumber dealer where it is to be used. Exterior-type plywood is manufactured with water-proof adhesives so it can be used under all weather conditions; and interior-type plywood is produced with adhesives for interior use. Top panels and framing members are 34 inch thick.

The top may be made from one piece—a 5 foot x 9 foot plywood panel —or from two pieces, 5 foot x 4 foot 6 inch each, hinged in the center. A hinged top will require less storage space. If top is hinged see diagram above for procedure.

The pieces for the base may be cut from one 4 foot x 8 foot panel (as shown, or one 8 foot x 30 inch panel. On one of the panels, carefully mark the frame pieces to dimensions, shown on the diagram above, and cut them with a sharp hand-saw.

The notches in the various panels should be accurate in width. They can easily be made by drilling a hole at the bottom line and sawing each edge into the hole. The corners can be trimmed with a chisel. Sand all edges. The table is now ready for finishing.

To obtain a light stain finish for general use inside, apply a resm sealer, followed by a stain coat, then a flat or gloss varnish as a wearing surface. Seal the underside of the top with one or more coats of the resin sealer. Finish all edges with sealer and other coats.

The base may now he assembled. The simple lock joints hold the base rigid without the use of any fastenings, It may be readily taken apart and stored until needed again.



### Roddiscraft

RODDIS PLYWOOD CORPORATION
MARSHFIELD, WISCONSIN

#### NATIONWIDE Robbiscraft WAREHOUSE SERVICE

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### Catalogs and

692—SPECIFICATIONS FOR ALUMINUM WIN-DOWS—Issued by the Aluminum Window Manufacturers Association, 209 Cedar Ave., Takoma Park, Washington 12, D.C., hooklet of specifications covers doublehung, casement and projected types of aluminum windows. Specifications are confirmed by the Pittsburgh Testing Laboratory.

693—EIGHT SIZES OF GAS BOILERS—for steam, vapor, hot water and radiant panel heating systems, using manufactured, natural, or mixed gas, are described in bulletin PM 12-0002 issued by the Automatic Heating Division of the General Electric Co., Bloomfield, N.J. A.G.A. output ratings range from 76,800 to 345,600 B.T.U.'s. Bulletin includes dimensions, specifications.

694—HOW TO SET UP WALL FORMS—Series of new bulletins illustrating and explaining how to set up Symons concrete wall forms are available from Symons Clamp & Manufacturing Co., 4249 W. Diversey Ave., Chicago 39, Ill. Complete detailed step by step instructions are given, as well as a blueprint of model foundation giving complete dimensions and a chart indicating materials necessary for the job.

695—HOW PLASTIC 18 USED FOR MODERN STORE FRONTS—For retailers, store architects and designers and for plastics fabricators, Rohm & Haas Co., Washington Square, Philadelphia 5, Pa., has published a new broklet which shows how its acrylic plastic, Plexiglas, can be used on store exteriors. Titled "Plexiglas for Modern Store Fronts," it illustrates more than a dozen applications.

696—HARDWOOD PLYWOOD COMMERCIAL STANDARD—No. CS35, effective with new hardwood plywood production since December 1, 1949, is available in printed form from the Southern Plywood Manufacturers Association, 728 W. Peachtree St., N.W., Atlanta, Ga. New standard supersedes Commercial Standard CS35-47, and incorporates major changes in glue types, maximum veneer thicknesses and test requirements, and minor changes in grades.

697—SPECIFICATION GUIDE TO SHEET COP-PER INSTALLATION—New 23-page master guide is now available from Revere Copper and Brass Incorporated, 230 Park Ave., New York 17, N. Y. Prepared expressly for architects, sheet metal contractors and others interested in or using sheet metal in building construction.

696—STEEL SHELVING AND STREAMLINED WORK BENCHES—A 12-page catalog featuring steel shelving, clothing lockers and other steel equipment has been published by Precision Equipment Co., 3714 N. Milwankee Ave., Chicago 41, Ill. New type heavy duty steel shelving and streamlined work henches are among the many types of steel equipment offered.

699—SLIDING DOOR HARDWARE—Catalog presents complete line of Kennatrack hardware, including new improvements in firm's line for 1950. New 400 series has full floating ball bearing axle construction, and an improved carriage design. Catalog is available from Jay G. McKenna, Inc., Elkhart, Ind.

(Continued on page 166)







New modern interiors featuring beautiful Marlite Wood and Marble Patterns.

Send for this helpful information!

# Now. get your share of this profitable business ... with Marlite!

Beautiful new Martite plastic-finished wall and ceiling panels in striking Wood and Marble Patterns make possible interiors like these—creating prafitable, year 'round markets for builders.

Think of the many interiors you can install with these authentic patterns—in offices, stores, banks, hotels, restaurants, funeral homes, institutions and a host of other important markets.

With Murlite, you after customers beauty that is permanent . . . walls that eliminate costly periodic painting and redecorating . . . durable finishes that are as easy to clean and maintain as the finest chine.

Marlite goes up fast over old walls or new, is easy to cut and fit, does away with troublesome wall preparation. Choose from many decorator colors and patterns. Your prospects are reading about the economy of Marlite in widespread advertising now. Take advantage of it!



MARSH WALL PRODUCTS, INC., Dept. 283, Dever, Ohio Subsidiary of Masonite Corporation.

- Please send 4-color Wood and Marble Patterns folder shawing typical installation pictures.
- Information on new Sound Film available for applicator training.

NAME TITLE

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CITY ZONE STATE

#### Connor

### "Laytite"

Maple and Birch

#### FLOORING

LONG LENGTHS WIRE THED!

#### in CARTONS

- 1. Have retail sales appeal.
- 2. Keep flooring clean and dry.
- 3. Keep moisture content more uniform.
- Make inventory easy—contents are plainly marked for grade and scale.
- 5. Give buyers exact cost of 10 sq. ft.
- Save time in laying mixed lengths without breaking several bundles.

MFMA SPECIFICATIONS

### PACKAGED FLOORING

Cartons keep flooring dry and clean.



Assorted lengths save time in laying.



Each carten labeled for easy inventory.

The CONNOR LUMBER and LAND CO. MARSHFIELD, WISCONSIN

#### Catalogs

700—METAL WINDOWS AND DOORS—A 44-page catalog offered by Ceco Steel Products Corp., 5601 W. 26th St., Chicago 50, Ill., deals specifically with the firm's steel windows, doors and operators, a line so complete and flexible that buildings of any size or type may be equipped. A 1950 edition, the number of this catalog is A.I.A. File No. 16-E. Drawings, installation details, and specifications are presented.

701—"HOW TO HEAT SMALL AND MEDIUM-SIZED HOMES COMFORTABLY"—A comprehensive 21-page catalog issued by Mechanical Home Systems Co., Inc., 1791 Howard St., Chicago 26, III., describes radiant-perimeter heating, radial heating, trunk and branch systems, ductless "controlled air," and the firm's furnace specifications. Illustrated with drawings, catalog contains excellent how-to-do-it pointers.

702—PORTABLE LIGHT AND POWER OUT-LETS—Two-color, 12-page bulletin on the String-alite line for portable light and power transmission is issued by Dept. A-72, Mines Equipment Div., Joy Manufacturing Co., Henry W. Oliver Bldg., Pittsburgh, Pa. Numbered SL202, the bulletin describes and illustrates latest designs of assemblies that are dirt and moisture proof and oilresistant.

703—FITTINGS FOR HOT WATER HEATING SYSTEMS—Bulletin on B&G Monoflo fittings contains pertinent data concerning sizes of fittings, both iron and copper, together with illustrations of their proper use. Available from the Bell & Gossett Co., 8200 N. Austin Ave., Morton Grove, Ill.

(Continued from page 164)

704—APPLICATION OF LAMINATED PANELS
—Attractive 12-page catalog issued by The Upson Co.,
Lockport, N. Y., illustrates and describes several different
applications of Upson laminated panels. Specifications and
installation data are given.

705—SIMPLIFIED PHYSICS OF THERMAL IN-SULATION—is title of 44-page booklet, a new edition, issued by Infra Insulation, Inc., 10 Murray St., New York 7, N. Y. The booklet is replete with facts about heat transfer, vapor and vapor flow, condensation radiant heating, and other information pertinent to the subject of insulation and insulation values.

#### SERVICE COUPON-CLIP and MAIL to CHICAGO

Readers Service Department American Builder.

(February, 1960)

79 W. Monroe St., Chicago 3, III,

Please send me additional information on the following product items, or the catalogs, listed in this department:

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OCCUPATION\*

\*Places note that accupation must be stated if full service is to be given.

NOW ... another exclusive CURTIS achievement

### the NEW PRESPINE

Now Curtis adds another major advantage to Prespine -- the all-wood panel material that provides new value in Curtis doors, cabinets and other woodwork! Today, by an exclusive Curtis process, the beautiful natural grain of ponderosa pine is accurately reproduced on Prespine. Here is another example of the way Curtis research constantly enhances woodwork beauty and utility.

Remember, Prespine is available only as used in the production of Curtis Woodwork . . . and at no extra cost. Read about its advantages below-then mail the coupon for additional information.

#### Here's What's New About Prespine!

- 1. Made by an auclusive Curtis process that duplicates the natural grain of pandarase pine on Prespine.
- 2. Prespine can be lightly sanded before finishing, if necessary.
- 3. Prespine can be painted, stained, shellacked, waxed, lacquered, varnished, enameled or blanded.
- 4. Prespine can be cleaned or washed after it in finished.
- 5. Prespine is fedagreef and lightereef. It has been subjected to rigid tests which prave its lasting durability.
- 4. Prespine, when it is finished, is weather

- sive humidity or sharp changes in tom-
- y, Prespine can be quickly and so cally finished by skilled or semi-skilled
- 8. Because of the nature of Prespine, there can be no grain raising or consequent checking or blistering of the finish.
- 9. Prespine dear pariels can be replaced as easily as ordinary deer panels.
- 10. All exterior Curtis Prespine doors are trouted with taxic-water reguliant sale tions to resist termites and decay.



Note the remarkable, wateral grain

### PLUS

#### these famous Prespine features

Made of finely divided wood by an exclusive Curtis process. Prespine panels withstand warping, shrinking and swelling. Prespine resists heavy impact blows . . . won't mar, dent or scratch readily . . . won't splinter or chip. It has superior rigidity . . . provides an ideal bond for paint or main.



Propine is used in most Cartis flat panel door madels, including interior, enterior and garage designs.

Cortis Companies Service Bureau AB-2P Cores Building, Clinton, Iowa Gentlemen: I want to know more about Prespine used in Cartin Woodwork. Please send addition

State .... State ....

American Builder, February 1950.

167

## Announcing The Monte R.

UNIQUE FEATURES OF DESIGN



Plain on courteer of For 1. Science, Barrieri, when ing Gilde All Breat or challed to now made because of J. Leanand Basil TOP BOLLERS' Strong sering feature error keep bress reliers in firm centred with separat houts on prevent refile and pravide for vertication in unling the feature to TOP TRACK' Mode of extraded abusiness

BOTTOM ROLLERS' Brass reliers and catending side plates insure a slave track and sewarth gaining action. PLOOR TRACK."
Track is at extraded eleminant allow, smeathly finished. The relies track is depressed below threshold for protection.

SIDE TUBES\* made of real-real-time theal, the 1' square tubes previde added rain bacarient for rigidity of panels. PANELS ... Smooth Massanife Temperad Procedured can be executively pointed, stained as papered as desired for forestill.

#### LOW COST... SLIDING DOORS

for Wardrobes, Closets, Rooms, Cabinets

# Glide-All SLIDING DOORS\*

Now, for the first time, you can have sliding doors in a complete, factory-assembled package!
New Glide-All Sliding Doors are furnished in heights to accommodate floor to criling installation and in widths up to 48°, complete with unique Wondall-designed rollers and tracks to accommodate up to 10 panels for a 40-foot span. Standard time are 8 feet in height and in widths to fit openings of 4, 5, 6 and 8 feet.

#### Save on Construction Costs

Glide-All Sliding Doors economically solve a problem in new building by providing up to 50% more usable soom and closet space than swinging doors allow. And with floor to ceiling installation, aliminating the high cost of the usual framing. bracing, plastering, etc., the economy is apparent.

#### Modern, Sewellful Appearance

Glide-All Deors are mode of Manonier Tempered Preséwood in neureal finish which can be painted, nained or papered as desired to harmoniae with room decor. With its streamlined valence and deccentive finish, a Glide-All Door intestilation helps give roome a beautiful, medern appearance.

#### Smooth, Depandable Operation

Glide-All Sliding Doors are constructed of modern materials, referred for fundamental noundness, proper functioning and economical production. They are expertly engineered by Woodall to provide smooth, rattle-free, dependable operation for years of reliable service.



This installation of Gilda-All Door shoes madiers wordtake appearance



Every inch of space is within easy reach in this wordrobs with Glide All Stiding Doors. Here would ream opers, too.



#### Installed easy as A-B-C

- A Top track (provided in size and length desired) is mounted an calling with screws. No drap booders required unless desired.
- B Bottom track is morely screwed to floor. No coally, tedious work involved.
- C Dears are mounted in tracks by pushing door up in upper track to compress top rafter springs then engaging lower raffers with floor track. Dears are roady to operate amonthly and quietly at their lifetime benefies.



AT THE HATIONAL HOME BUILDERS SHOW STEVENS HOTEL, CHICAGO, FER. 19.23

WOODALL INDUSTRIES INC.

NEW YORK

PY 10 Numbers Bird same Cay 1 N. \* 1023 Methods Based of the Control of the

### See ALUMAROLL'S "Show Piece"

#### **Aluminum ROLL-UP Kitchenette Door**



For Kitchenette, closet doors, etc.-This metal roll-up door is priced to meet the price of all or any type of closure.

#### But look at these Added Features-

- For cubic economy a real space saver.
- For sparkling good looks Baked on enamel finish.
- For ease of installation Furnished to your size specifications with side rails.
- For compactness Rolls-up to less than a 6" diameter roll. No swing out or fold space needed.
- For ease of operation A counterbalance spring roller. The Aluminum Roll-Up Kitchenette Door has passed metropolitan building code requirements. — Approved by the New Jersey F.H.A. office and the New Jersey Tenement House Department.

SEE BOOTH 19 New Products Division (Congress Hotel, Chicage) of the National Association of Home Builders Annual Convention and Exposition.

### COMPLETE FILE DATA -- MAIL COUP

Builders, Contractors, Architects, - attach return coupon to your letter head, you'll receive a prompt reply, including complete file information, detail and installation print with minimum and maximum size specifications plus pictures of actual instal-

|       |      |     | mette            | estion abo<br>doors | M ALUM |
|-------|------|-----|------------------|---------------------|--------|
| i am  | .8   | Bus | sier<br>streeter | C But               | lider  |
| Hamo  |      |     |                  |                     |        |
| Addre | 196. |     |                  | ******              |        |
| City  |      |     |                  | State               |        |

#### Correct Footings

(Continued from page 153)

allowance would amount to \$760 pounds, and the actual loading would probaly never be more than 1/5 of that figure. Definitely, then, residence footings which are designed for full live loads are not correctly proportioned. Though the soil pressure may be very low under parts of the structure which carry no live loads, such as chimneys, fireplaces and end walls, the soil pressure under parts which do carry live loads will be much less, for the loads for which they were designed are not there, and in all probability never will be.

In most sections of the country roof live loadings are entirely comparable with live floor loadings. It is hardly practical to design a roof for less than 15 or 20 pounds per square foot live load, for it would be unsafe for men to work upon it. And yet 20 pounds per square foot is equivalent to 24 inches of new fallen snow, or about 5 inches of solid ice, and to produce 20 pounds per square foot wind pressure requires a wind velocity of 100 miles per hour, Granted that in some parts of the Northwest live loads of 30 to 40 pounds per square foot are common, it is equally evident that in Southern sections a load of 15 pounds is unheard of. In Southern latitudes, live loads on roofs could, and should, be almost or entirely ignored when designing foot-

It should be remembered that practically all live loads on floors and roofs of houses, with the exception of the furnishings, are either intermittent, moving, shifting or short time loads. Loadings of this kind do not cause permanent settlement of footings unless the bearing soil is seriously overloaded. Serious settlement requires time, and the soil which is stressed by short time loadings will show a certain amount of recovery when the loads are removed.

All dead loads must be considered when designing footings, All live loadings cannot be entirely ignored, but full design live loads on residence floors at any one time are very improbable. Even the probable maximum live load is almost certain to be of short duration. The following method of proportioning footings takes these facts into consideration, with some allowance for contingencies.

Use the full dead load and 50 per cent of the probable maximum live loads when designing footings for homes. For upper floors the live load allowance might well be decreased to 30 per cent.



### BE YOUR OWN BOSS-SAND NEW AND OLD FLOORS

Step behind this American Machine -and you can step up your earnings! Right now in your communitythere's a real opportunity for you to make money all year 'round by starting a floor sanding business of your own.

Here's something that's "right down your alley"-if you want steady and pleasant indoor worka good substantial income with earnings of as much as \$25 and more a day-an opportunity to operate as a sub-contractor in new construction and as a separate business when you sand older homes.

No experience or special schooling needed-sanders are easy to operate you can start sanding floors and make money the first day your machines arrive. Prospects everywhere new and old homes. No large investment-the cost of floor sanding equipment is usually much smaller than the cost of a new car. The overhead is low and you need no elaborate offices, workshop, storeroom or trucking equipment. Many men operate from their own home and use a regular passenger car to transport their equipment from job to job.

Thousands of men have been successful in floor surfacing. Many operate alone and hundreds who started out singly have built up larger organizations. Age makes no difference. Men are actively engaged in this business from 18 to 80 years old. In floor surfacing you let the machine do the work. It's a future that can bring you a lot of satisfaction and steady money! Send for "money-making" booklet entitled "Opportunities in Floor Surfacing"-use coupon and enclose 25c in coin or stamps to cover handling.

FREE DEMONSTRATION of American Equipment can be arranged without cost or obligation



Clanin lives dishing Heave 100 floor jobs



#### MERICAN FLOOR MACHINES

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Selling a house starts at the front door... and nothing

makes as pleasing a first impression as the melodious response of an Edwards CHORDETTE Electric Door Chime! These little extras are mighty important, builders say, in today's buyers' market!

#### STYLED BY A FAMOUS DESIGNER



Perfect touch to every decorative scheme is the classic simplicity of CHORDETTE... styled by famous designer, Lurelle Guild. In chrome and white or mahogany and brass. StZE: 11½" high, 5" wide, 3" deep-

#### OFFERS 3 MUSICAL ADVANTAGES

(1) Announces front-door callers with melodious chord continuing as long as entrance button is pressed. (2) Sounds a sequence of two symphonic notes as a rear-door signal. (3) Unmatched tone purity assured by Edwards' exclusive Sonoscope testing.

Chordelle ELECTRIC DOOR CHIME

Fairfax
DOOR KNOCKER CHIME



NON-ELECTRIC CHIMI a musical hit with everyone! Looks like a knocket...sounds like a chime! No wires, no time of trouble ineralling!



Edwards Company, Inc., Norwalk, Conn. In Conste: Edwards of Conste, Ltd.

#### PRODUCTS ON REVIEW

(Continued from page 152)



AB250411—All-metal door canopies. Air Control Products, Inc., Cooperaville, Mich. Profucts doorways against los, rain, snaw, and oun. Finished in three calent; green, bloo, and tile red. Flashing salls or screws to house; heavy steel brackets screw canopy to house. Projects 30 inches.



AB250410—Sectional all-steel filt-up garage door. Morrison Steel Products, Inc., Buffelo, N.V. Roquires five inches of head-room. Factory outembled, ready for installing, Baked-on-igney finish, Fee standard 8 x 7 foot opening. Also 8½ foot opening. Merchandizing outlets now being arganized.



AB250412—E-Z-ON weather strip. Robert N. Baitz and Co., Box 1081, Chicago. 90, Ill. An all-metal interlocking weather strip for surface installations, double lung windows of wood or metal, that requires no rabbetting or dismounting of sesh. For use on old or new windows, Cft 9-gauge sinc.



### THERE MUST BE A REASON WHY PITTSBURGH "INTERLOCK" OUTSELLS ALL OTHERS!

[1's patented "interlocking" feature, backed by our national advertising program, is attracting thousands of customers all over the country!! Pittsburgh "Interlock" is styled in decorators' good taste in hundreds of luxurious color combinations! Exclusive! It "locks" on wood, plaster, stone, or non-porous surfaces "for a lifetime"!

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... 25% faster installation means lower cost per job! No grouting! No clean-up problem! More satisfied customers! BIGGER profits for you!

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BATHEOGES Modern, functions beauty of



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MESTAGRANTS

| Jones & Brown, Inc.<br>439 Sieth Avenue | AF                      |
|---|-------------------------|
| Pinsteegh 19, Fa.                       |                         |
| Please tell me how Pirtsburg            | ph "Interlock" can be a |
| Super Sales Magnet to attract           | BIGGER profes for me    |
| Super Sales Magnet to attract<br>Numa   | BIGGER profes for me    |
|   | BIGGER profes for me    |



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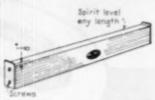
#### ICTOR ENGINEERING CORPORATION

WILSON AVE. AND GREEN LANE,-BRISTOL, PA.

#### How-To-Do-It

#### How to Get Best Results from Level

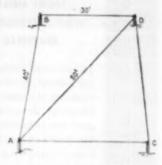
TO OBTAIN the best possible results from a hand-spirit level, screw a steel plate on each end of level. Plate to extend 56-inch above top face of level and to be filed flush on both sides and bottom of level. The application of the steel plates come



in handy when leveling over an uneven surface. Portion of blade of an old hand saw can be used for the plates.--Submitted by R. T. Gravrok, Vermillion, S. Dak.

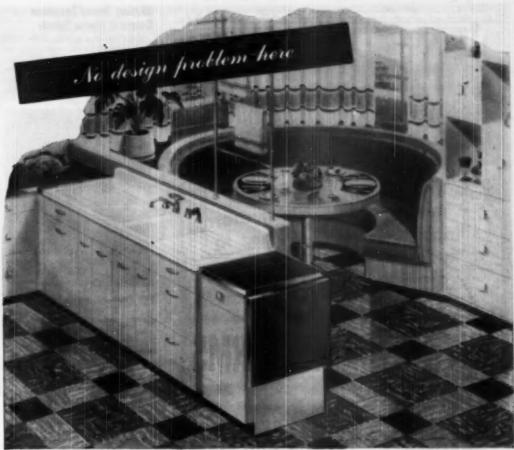
#### How to Stake Out Building

A QUICK, easy and accurate method of staking out a building is shown above. First, figure the diagonal of the building. Provide four short stakes to be used at each corner. In the sketch the hypothetical building, 30 feet x 40 feet, has a 50 foot diagonal.



To lay out building, drive stake "A" at corner. Then drive a 3D common nail in center of stake to within 36-inch of top. Fasten steel tape to nail and measure 40 feet to stake 'B', Remeasure just 40 feet on top of stake and drive rail. Front line of building is thus established.

Measure 30 feet from nail on 'B' and 50 feet from nail 'A' and corner 'D' is determined. Then measure 30 feet from 'A' and 40 feet from 'D' and nail 'C' is located. To prove, measure 50 feet from nail 'C' to nail 'B'. To locate the hatten boards use lines and a level.-Submitted by R. G. Naugle, Russells Point, Ohio.



Fixtures courtery of Assertion Radiator & Standard Sanitary Corporation, Pottsburgh, Pd.

lutteres: XZA 800-Dess Gray-401 SA Bright Rad- ZW A-701 Plans

#### ... when you start with FREMONT rubber tile floors

To build smart room interiors, start with smart, colorful flooring. Whether your particular problem happens to be a den, entrance hall, bath, kitchen or nursery, Fremont's 17 beautiful fade-resistant colors are ideally matched for room color harmony. Fremont floors are easy to lay, create continuing customer satisfaction because they require so little care and outlast other types of flooring. Next building job, give serious thought to installing Fremont Rubber Tile. It works wonders in making a gracious, liveable room.

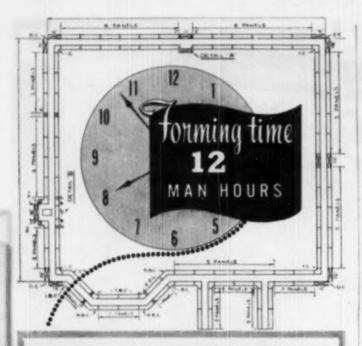
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MAKERS OF: Bubber Tile + Rubber Tile Adhesive + Visyl Rgalig \*
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| CITY  |                |               | - |



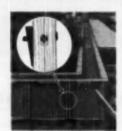
### WITH SYMONS FORMS

Here you see a typical house foundation form layout that can be set-up by 3 man in 4 hours. There are 1750 aquare feet of forms. Cost of erection of \$2.00 per mon hour in \$24.00 or 155c per oquare feet. Bripping can be completed within 2 hours of a cost of \$6.00 or 15c per square feet.

| TOTAL COSTS.   | PER | POWARS | FOOT | - | PORM! |
|----------------|-----|--------|------|---|-------|
| Setting-up     |     |        |      |   | 115   |
| Stripping      |     |        |      |   |       |
| Form Cost (per |     |        |      |   |       |
| Tip Cool       |     |        |      |   | No.   |

Forms overage 75c per square foot, With 50 uses (100 uses is common the per-ces cost is 1½c. Ties hold a square fast of forms. At 6c each the lie cost is 1ic per opone foot.

Symons Forms one available completely made up ready for use on you may purchase the hardware for building your own Spree, Forms, can also be rented with 60-day surchase aption. Paid rentals apply on purchase price.



JUST 3 PIECES!

2. Form Tie 3. Wedge form the brook back into concrete connecting bolls and wedges can be used again and again.

|               | SYMONS CLAMP & MPG. CO.<br>4381 West Diversey Avenue, Chicage 39, Illinois  | -  |
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| ORMS - SHORES | Safarmation regarding other Symans Pradects Column Clomps   |    |
| <\$>          | Address   |    |
| X             | City Save Snote   | _  |

#### Sliding Doors Increase Unusual Room Space

New, low-cost sliding doors made of Tempered Presdwood are announced by Woodall Industries, Inc., 3500 Oukton St., Skokie, Ill. Complete with roller assemblies and tracks, the doors are for wardrobes,



NEW "Glide-All" sliding doors for homes

closets, rooms and cabinets of homes. The "Glide-All" doors feature floor to ceiling application, eliminating framing, bracing and plastering, and increasing usable room space.

Panels are furnished in widths to 48 inches, and as many as ten panels may be accommodated by tracks to cover a span up to 40 feet. Spring tension arms keep top rollers in firm contact with upper track, and lower rollers ride on floor track.

To install, the top track is screwed to the ceiling, the bottom track is screwed to the floor, and doors are set in by inserting top of door in upper track and pushing up to compress top roller springs and then engaging lower rollers with floor track.

Panels are produced in standard sizes of 96 inches high by 24, 30½ and 36½ inches.

#### Ideas For New Kitchens

A promotion piece published by the M and M Wood Working Co., 2301 N. Columbia Blvd., Portland 3, Ore., offers 16 ideas for well-planned kitchens, telling how to build them with Malarkey plywood and patented flush cupboard door stock.

Presented is Catalog 671 on page 126 in the December, 1949 issue of American Builder, no price was listed for this promotional piece. The M and M Wood Working Co. advises that a price of 10 cents each is charged for this literature. Each attractive folder carries a bill of materials for each of the 16 ideas.

YOUR CUSTOMERS EXPECT YOU TO RECOMMEND THE BEST



HEATFORM

The Superior Heat Circulating Fireplace most efficient and durable of all .

### delivers more heat

- more effective heating turface
- heating chambers around the threat and dome as well as the Brobes
- air possages at each end of and through the throat connect upper and lower heating chambers
- air contacts all heating surfaces without use of tens
- larger cool air inlet and warm air outlet capacity

### more years of service

- ribbed reinforced firebox controls warpage and adds greater strength
- malatracted flow of air over all heating surfaces removes heat fester, thus preventing ital from reaching deterioraling temperatures
- round air passages across the throat reinforce its construction prevents dome sagging insures proper operation of
  - no expessed metal parts beneath chimney to rust-out

### easier to install

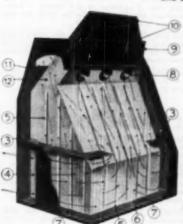
HEATFORM is a perfect guide, h to flue, consisting of firebox, threat, dame and built-in damper around which massary walls are easily built

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in American Home, Batter Hames & Gardens, Household, House Beautiful, Southern Agriculturist, Sonset, Small Hames Guide and

#### THERE SUBSTITUTE FOR HEATFORM" IS NO

- designed and manufactured by the pioneers of the heat circulating fireplace industry and used in homes and cabins all over America.



KEY TO PHOTO AT LIFT - SHOWING REAR AND SIDE VIEW

with part of outer metal cut away showing the inside lining of firebox and arrows showing contact of air to all heating surfaces.

- Merizantal baffle plates which direct a large refume of air intake to the lower rear bearing chamber and ever the lastest of the motal
- 4. Large air inlets at flear level
- 5. Bibs individually die formed into the builter plate add strength and neutralize reponsion
- 6. Location of root coal air inlet
- Bottom view of oir heating cho-
- Superheating, connecting round air possages through the Street
- Most control dumper has understong poker friction control to regulate draft.
- Smoke dome
- 11. Side air passages from favor to upper feeding
- lesser lining of the threat PHOTO AT BIGHT - front view of HEATFORM

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#### BOOK REVIEW



READERS of this page have probably noticed before now that a fair number of the books we review here each month are not necessarily new publications. This is not because there is any lack of new building titles published each year, but rather because we want to bring to the attention of American Builder readers those books, both new and not-so-new, that we think are among the best works on a particular building subject.

Then, too, we feel that there is not much point in giving space to a bad review of a new book when it is clear that there are a number of excellent standard works that bave gone through edition after edition and which are still the best books in the field. We are quite sure that these are the books our readers want to know about.

#### **Masonry Simplified**

Br J. Rahh Dalzell and Giffert Townsend, Vedome I: 555 pages, illustrated, 314 sectors by \$16 sectors. Volume II: 506 pages, illustrated, 314 sectors by \$16 sectors. Volume II: 506 pages, illustrated, 314 sectors by \$16 sectors. Vol. 11, 54.30, No. 27 on opposite page.

This two volume study (either volume may be bought separately) of masonry construction is a good example of books that were copyrighted in 1948 and since that time have maintained their original high position in the trade.

Volume I carries the sub-title, Tools, MATERIALS, PRACTICE, which indicates that this first book is strongly slanted toward basic masonry principles. Important principles they are, too, as can be seen from a list of chapter headings—Lime, Its Manufacture and Application; Mortar Types, Properties and Uses: Concrete Characteristics and Mixing; Blueprint Reading; Concrete Masonry; Structural Clay Tile; Brick Masonry; and Masonry Sidewalks, Driveways, Floors, and Steps. The chapter on Blueprint Reading is especially good in that it has been written to order for the mason and deals directly with masonry details as they are shown in blueprint plans.

A glance at the chapters in Volume II, Practical Construction, gives a good idea of the broad treatment given the practical side of masonry work: Building Forms for Concrete; Design and Construction of Sootings; Foundations and Waterproofing; Heams and Lintels and Their Use; Column Design and Construction; Chimneys and Their Construction; Fireplace Design and Construction; Walls and Partitions; and Septic Tank Systems—all operations described in line with the best modern practices.

Two of the most useful features of this fine pair of hooks is the fact that they are written in good, solid, down-to-earth language that most of us can understand without having a dictionary at our elbow, and they are packed with hundreds of clear pictures and drawings that show just how each masonry job should be carried through to completion.

It is our guess that in one way or another these books will give the reader a fine lot of "know-how" that could otherwise be secured only through years of our the job experience.

### A SPECIAL

Here's an easy way to get new essential information that will help you increase your income. Every volume a standard work by leading authority. Remember—it's the informed builder who is the successful builder.

#### **ESTIMATING**

- THE BUILDING COST CALCULATOR. By John R. Smith. A system for certving at building construction cost by use of schedules giving cost of standard units of construction of varying costs of labor and materials. 316.39.
- RIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wüsen and Cleff M. Roques. Everything needed to "take-off a bill of materials from set of plants and specifications for a framebouse—with most helpful quick-reference tables and short-cut methods that simplify the work. \$3.00.
- THE BUILDING TRADES HANDSOOK. Ready reference on building subjects—methemotics, architectural drawing, structural design, materials and methods, \$1.75.
- CONTRACTOR'S MATERIAL LIST. A 18-column take-oil form for complete listing of materials and labor costs. \$1.90.
- SPECIFICATIONS. Full set of detailed house specifications (and issue index), with spaces for inserting the pertinent descriptive data. 5.30.

#### CARPENTRY AND BUILDING

- HOUSE CONSTRUCTION DETAILS. Compiled by Nelson L. Burbank. Exact working quide on every detail of house construction from foundation to finish. Tells dimensions, materials, processes, siep-by-step working methods. 34.36.
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#### THE STEEL SQUARE

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   4-epartment buildings, and 5 largue ones ranging from 6 to 12 apartments. Cubic tootoge given. \$1,00.
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- MODERN METHODS OF HOME HEATING. Standard heating systems illustrated with 17 floor plans showing heating outlets. 49 photos of equipment and installictions. 25 holler and piping connection diagrams. and 11 heat loss calculating tables. 8.50.
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- HOW TO DESIGN AND INSTALL FLUMSING. By A. J. Matthian. Ir. Every step in the design and installation of the plumbing system. to fulfill requirements indicated in blueprints and specifications, explained and illustrated. \$3.50.

#### PAINTING AND DECORATING

 PRICE GUIDE FOR PAINTERS AND DECORATORS. Tables covering practically every type of work done by the pointer and decorator, with suggested prices based so various wage scales. \$1.25. 24. PAINTING AND DECORATING CRAFTSMAN'S MANUAL.
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#### BRICKWORK AND MASONRY

- HANDBOOK OF BRICK MASORRY COMETRUCTION. By John A. Mulliques, For measure operactures, estimators and construction engineers. 83.98.
- 36. DEASONRY EMPLIFIED. Vol. 1. By J. Reliph Dulzell and Gilbert Townsend. Complete explanation of the teals, meterials and practices of measonry—including bluoprint reading, use of concrete block, cley tile and heick, building mesonry olderedles, driveways, floors, and stops. 34.56.
- MASONRY SIMPLIFIED, Vol. II. Practical measury precedures in the vertices phones of construction, from building forms for concrete to constructing freeplaces and coptic tenk systems. Includes discussion of heading new products such as glass blocks, waterproofing mixtures and inculating blocks, 55.98,

#### ELECTRIC WIRING

- INTERIOR ELECTRIC WIRING AND ESTIMATING. By Albert Uhl, A. L. Nolson and C. H. Dunlup. How to do it book on interior wiring and cost estimating. \$2.75.
- WESTINGHOUSE HOME WIRING HANDBOOE. By A. Carl Bredahl. A guide for planning the wiring of moderatepriced homes, with emphasis as safety, effectiveness and efficiency. 31.30.

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#### Sunshine for Sale

(Continued from page 123)

project and containing 750 square feet of area is priced at \$7,175. The houses represented by this price are placed upon lots averaging 65x100 feet and included in the sale price are a refrigerator, gas range, automatic water heater, venetian blinds and full tile baths with colored fixtures. The house is of concrete blocks stuccoed on the exterior, resting upon the perimeter of a concrete slab floor. Asphalt tile is utilized as a floor finish. The interior walls are furred and gypsum drywall applied both to side walls and ceilings. The roof has a low pitch and is covered with composition roofing. The interior walls and ceilings are painted in interesting pastel colors. Veterans pay as little as \$25 down with carrying charges complete at \$45 per month,

#### A Poured Concrete House

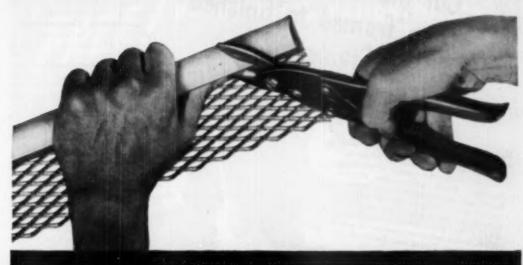
Unique in character was a monolithic house resting on a floor slab with side walls, interior partitions and roof all poured in one process by a tremendous controllable cement mixer called a "cannon," The side walls are eight inches thick, the roof a 6-inch slab and interior partitions are four inches. Only closets are framed in wood. The rough structure is then stuccoed on the exterior and plastered direct without furring inside. Composition roofing is applied to the top slab. The house contains 800 square feet and sells for \$7.550.

#### A Home of Good Value

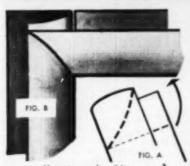
Somewhat higher in the price scale is a 1000 foot, two bedroom home that sells for \$9,925 and 1130 square foot home with three bedrooms that carries a price label of \$10,950. On both of these houses FHA has awarded commitments within \$100 of the selling prices on the basis of 25 year mortgages. With a \$100 down payment and a monthly carrying charge of \$77.50 on the larger of the two, the homes have been purchased and occupied as fast as completed. No "For Sale" signs appear anywhere. They have concrete block perimeter walls, stuccoed outside and furred and plastered inside. The floors are of joist construction with subfloors, oak finish floors and ventilated crawl spaces underneath. The roofs are low pitched, about 30 degrees, and covered with a locally made cement tile. of Spanish pattern. The interior is ventilated by a ceiling fan exhausting into the attic, and the homes are provided with an abundance of steel frame windows with ample screened

(Continued on page 182)

American Builder, February 1950.



## Time-Saving Construction Tip - with Milcor Steel Casing (and windows)



#### How to make this time-saving cope-joint

Cut one length of Milcor Steel Casing with lathers' union as Indicated by datted line in Figure A. Cut the other length source. Slip the first length over the second as shown in Figure 8. That forms a perfect, permanent, tight joint,

Milcar Steel Casing



#### Easy way to make a better, tighter steel-casing joint - faster

Here's a simplified cope-joint for Milcor Suel Casing. It saves expensive construction time on every job - because it's easier, faster - and permanently tight. (See the diagram illustration at the left.)

Milcor Steel Casing offers additional savings on overall building costs. It cuts time and costs amazingly on erection, plastering, and finishing. And that's just the initial saving. The permanence of Milcor Steel Casing keeps on saving - on maintenance, refinishing, and decorating - for years and years,

Why not give every job the extra appeal of these outstanding advantages? Build a reputation for the finest modern construction with Milcor fine!

Casing — and the other steel building products in the complete Milcor line. See the Milcor Catalog in your Sweets File for complete details

#### INLAND STEEL PRODUCTS COMPANY



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Boltimore 24, Md. \* Buffolo 11, N. Y. \* Chicogo P. (II. \* Cincinneti 25, Ohio Cleveland 14, Ohio \* Derroit 2, Mich. \* Kansas City 8, Ma. \* Los Angeles 23, Calif. Hew York 22, H. V. \* Rochester 9, H. Y. \* St. Louis 10, Mo.

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INLAND STREE PRODUCTS COMPANY, 6029 West Surnhum Street, Milwaydor 1, Wiscon Send me a copy of the Milese Manual fun obligations giving juil details on Milese Steel Casing and other products in the complete Milese Metal Lash Products line.

Address

American Builder, February 1950.

## Cut the time from "framed" to "finished" with a Stanley W7 Safety Saw

Make the most of the skill you pay for.

Give a good mee a Stanley Safety Saw, and discover how much better he can be, and discover how much better he can spread his skill, how much further he can spread his skill. Handles as easily as a band saw. Duplex, Handles and independent trigger switches handle and independent trigger switches for use in all positions. Simple wing-tut significant statement for depth of cut from 0 to adjustment for depth of cut from 0 to adjustment for depth of cut from 0 to adjustment for depth of cut from 0 to adjustment. Titting base for bevel cuts.

Operates on AC or DC.

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When you buy an electric tool you have to take somebody's word about gears, motor, bearings, shaft, swritches, power, etc. Whose word about tools could be etc. Whose word about tools could be more reliable than the word of "Stanley" more reliable than the word of "Stanley" more reliable than the word of stanley means to electric tool the name Stanley means to electric tool the name Stanley means to electric tool the name Stanley shall tested tool is quality built, thoroughly tested tool is quality built, covered by a generand honestly rated. Covered by a generand honestly rated. Covered by a network of Stanley Service Stations. See your dealer or write for complete catalog. Stanley Electric Tools, 492 Myrtle St., New Britsin, Connecticut.

Stanley-Curter 13
Power Planes. In-gest,
ment privately electrical
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The second secon

GTANLEY)

#### Sunshine for Sale

(Continued from page 180) ventilating sections. The prices include range and refrigerator.

#### **Outstanding Development**

Essex Village, an outstanding development with a complete shopping center contains an extensive 60% rental project, together with one story duplexes and single dwellings. Various types of construction have been utilized including frame covered with siding, shingles and stucco and stuccoed concrete blocks. Roofs in the project are generally pitched and covered with the same sort of Spanish tile as have been previously described. Prices are comparable, for the various types to other "askings" in the area. One unique feature in merchandising lies in the ssethod of selling the duplex buildings. Instead of dividing them into separate units on the center of the party wall, they are sold as a whole with one side rented. In making the sale the lease and the security deposit are transferred to the purchaser to insure his ability to maintain the monthly payment on his mortgage. The price for the complete duplex buildings is \$14,950.

Wage rates in the Miami area are comparable with Chicagoland, some trades slightly higher, some lower. It accordingly becomes possible to draw some comparisons in the way of construction costs. In features of design and space allotment the two localities do not differ materially, but in climatic demands Chicagoland is burdened with many extra costs. Add deep foundation walls with thoroughly insulated slabs. Add side wall and ceiling insulation and ventilated open attic spaces. Add weather stripping or storm windows or both. Add heating plants that run from \$500 to \$1000 with chimneys or necessary vents. Add basements, found necessary in many local sections, and you build Southern Florida costs to the asking prices in Chicagoland, almost to a penny. The comparison establishes the fact that home builders, the nation over, are of the same mind. They seek to serve the home seeking public at the lowest possible prices commensurate with conservative opcration and are making an enviable record in that respect.

#### B. T. Roe Heads Sales For Tracy Manufacturing Co.

Recently appointed vice president in charge of sales for Tracy Manufacturing Co., Pittsburgh, is B. T. Roe, who was formerly director of distribution for the Crosley Division, Avco Manufacturing Corp. He is widely known in the electrical appliarsee distributing field. FREE! HANDY SPECIFICATION FOLDER!

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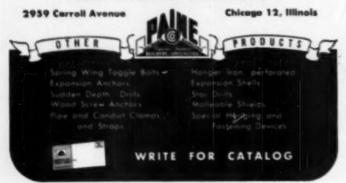
American Builder, February 1950.



reduce your costs. This simple, yet amazingly versatile product can be bent or twisted to fit your exact needs. It can be used for hanging pipe, cable, conduit and numerous other items. It can be used for strengthening construction.

Hanger Iron may be installed with nuts and bolts, acrews or nails. It is ½' wide and 20 gauge in 10' zinc-plated coils. Perforated with holes for ½'' bolts on ½' centers. Reduce your construction costs ask for Paine Coiled Hanger Iron from your supplier today.

#### THE PAINE COMPANY



#### National Lock Offers New Cabinet Hardware

In announcing their new No. 150 cabinet hardware assortneed, the National Lock Co., Rockford, Ill., presents four new items in their line: Forged brass hardware, a new type



New National Lock Co. display board

concealed hinge, concave knobs, and a distinctively styled die cast handle. In addition, the No. 150 offers the complete Deluxe and Aristocrat statched sets.

Popular finishes such as bright brass, dull brass, dull bronze, bright chromium and dull chromium are stressed by the company as adding to the sales-desirability of many of the bardware items.

Offered as an assortment, with well-balanced quantities of each item, the No. 150 also provides a display board requiring minimum counter space.

#### C. A. Pynn New Van Packer Vice President

Chester A. Pynn, for the past two years president of Homecrafts, Inc., of Floral Park, N.Y., has been made vice president in charge of distribution of the Van Packer Corp., manu-



CHESTER A. PYNN

facturers of precast chimneys with headquarters in Chicago, officials of the company recently announced in New York.

Pyun had previously served 13 years as manufacturer's agent for the A. O. Smith Corp., Milwankee, Wis. In his new position, Pynn will be in charge of international distribution of the precast chimney.

Lap Joints

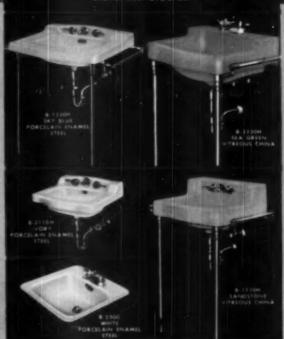
# You build 'em... BRIGGS Beautyware IN COLOR sells 'em!



# Adds only a few dollars to cost of each home... gets back <u>all</u> your dollars ... plus profits... <u>faster!</u>

Here's why! Surveys prove that people seast colored bathroom fixtures. In the last hig national survey, 64% of all families interviewed said that they thought color was definitely smarter, newer, more modern . . . and that given a choice at a reasonable price they would take colored over white fixtures every time. Now Briggs hrings them—and you—colored fixtures at a price so reasonable it is revolutionary! Only 10% more for Briggs heautifully styled stainproof fixtures in color than for white! Every word of that statement is worth its weight in gold to you. Not only because it means faster ales . . but it may well be the sales-clincher between one of your houses and some other builder's house 6 blocks away. Get on the handwagon! Start using Briggs Beautyware colored fixtures today! Briggs Manufacturing Company, 3001 Miller Avenue, Detroit 11, Michigan.

NOTE: 18% additional charge for colored were applied to complete sets including Briggs bress Attings.



DEPOSITE OR OTHER PARTY COME.



You can adapt Spencer Boilers to all commos fuels-oil, gas, coke, and anthracite or bituminous coal.

#### EASY INSTALLATION

You will appreciate the flexibility that Spencer offers. All models are adaptable to either front, rear, or side installation when automatic firing is used.

#### QUICK STEAMING

You can assure owners of immediate heat whenever they need it. Special built-in coils provide instantaneous service hot water.

You can be sure that Spencer heavy-duty construction throughout means extra dependability, extra trouble-free service.

#### EASY CLEANING

You can easily explain to owners that all Spencer Boilers are designed for easy cleaning.





with ASME req Fully approved by the Steel Bosley Institute.



## For better apartment heating, specify Spencer

When planning apartments - and other types of residential or commercial structures-you'll find many advantages to specifying Spencer for heat and hot water. Note (at left) just a few of the many reasons why Spencer has earned an outstanding name among professional men and owners alike.

for further details on the complete line of Spencer Boilers, write, wire, or telephone today.

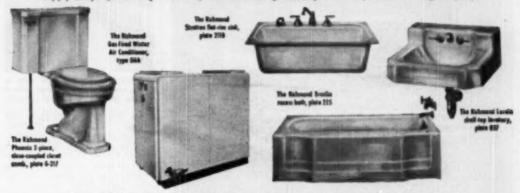


#### THERE IS A SPENCER for every building, for every fuel

| For homes, small buildings                  | 29 models  |
|---|------------|
| For small apartments, light commercial uses | 13 models  |
| For large apartments, heavy commercial uses | .34 models |



Aerial view of Woodlawn Park, Minneapalis. These 100 new homes built by Williamp, Inc. all have Richmand Plumbing Fixtures and Richmand Gas-Fired Winter Air Conditioners—distributed by Globe Plumbing Supply Company. Plumbing installed by Tabaka Plumbing—heating installed by Welter Heating Company.



#### Richmond Plumbing Fixtures and Winter Air Conditioner Installed

Richmond proved a wise choice for these fine new homes in Minneapolis's Woodlawn Park Section. The four Richmond Plumbing Fixtures and the Air Conditioning Unit installed in each of the 100 homes bear the famous Richmond stamp of quality—quality of appearance and quality of performance. Whether it's a single replacement or a large development, you can be sure when you select Richmond. You can be sure of efficiency in operation and beauty of design. You can be sure of satisfied clients—happy with Richmond serving their plumbing and beating needs.





#### Minnesota Dealer's Farm Department Stresses Good Barn Insulation

Ever since its organization thirty years ago, The Kruse Company, Rochester, Minn., building material dealer, has recognized the importance of the farm market, and has served rural trade through a special Farm Department. There is considerable dairying in the area and the company has placed special emphasis on good dairy barn construction.

When Clifford V. Hicks, manager of the Farm Department, joined the firm eleven years ago, one of his first duties was to inspect a dairy barn that became and still is an effective selling argument for insula-

tion.



INTERIOR of bern. The 8-feet alloy in center permits a tractor and manure agreeder to drive through for cleaning

"Mr. Kruse wanted me to see that particular barn," Hicks commented, "Because it was a demonstration of an insulated and an uninsulated wall in service under identical conditions. It had the further distinction of being the first cavity wall around here. The owner had conceived the idea himself of building an 8-inch concrete block outer wall, and a 4-inch block inner wall, with a 1-inch air space between. He figured this air space would provide the insulation.

"He came in to discuss the construction with Mr. Kruse, who pointed out that calling this a 'dead air space' was a misnomer, because the air would circulate and set up convection currents that would carry away heat, and in addition heat would radiate across the space. The farmer was partly convinced; enough, anyway, so he agreed to pour vermiculite fill insulation into the cavity; but he wasn't thoroughly convinced, and on the East wall he left out the vermiculite alsove and between two windows, just to see what would happen. When I first saw the barn, it had been in service almost two years. I asked the owner how it was working out. He pointed to the area between the two windows. That uninsulated space was dripping wet, while

the rest of the wall was so dry you could strike a match on it. Whenever one of our farm customers talks about the insulation value of dead air space, I tell him to go out and look at that particular harn. Ever since this first joh was installed, and we saw its outstanding results, we have recommended vermiculite insulation for a good, dry wall. Before vermiculite insulation good, wall, we recommended vermiculite fill for cavity wall insulation. Now we mee the 1:16 mix of vermiculite concrete."

Another dairy barn serves as a demonstration of well-planned remodeling and the way in which adequate insulation and ventilation can make a cold, wet barn warm and dry. This barn, 36 by 100 feet, was 14 years old. It had a single 12 inch block wall with no insulation, and frost and moisture collected on the walls so thickly that water ran down the alleys.

Eight years ago, the farm was sold, and the new owner wanted to dry up the walls. Hicks recommended lining the interior with cream-colored 4-inch clay tile, leaving a two inch cavity between the new and existing walls. Wall ties were placed, and the void was filled with vermiculite, Storm windows and a thermostatically-controlled ventilating system were installed. There was no more trouble with moisture, and the barn is comfortably warm in winter. Also immediately apparent was the improvement in the health of the herd, and the reduction in mortality of young calves.

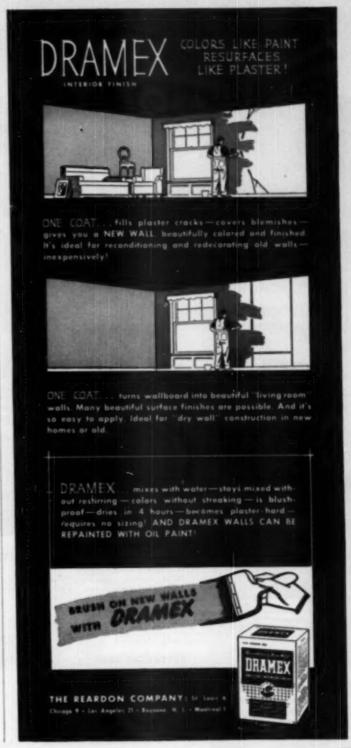
In conjunction with the Farm Department, The Kruse Company maintains a drafting department; and this has been an important factor in increasing rural business. No charge is made for planning, drawings, or blueprints.

"We feel that our obligation to our customer does not end with selling merchandise." Hicks explained. "We want to help him in every way we can and give him the benefit of our experience.

"When a customer comes in, we find out, first, what type of building he wants. Then we discuss the best way of building it, and recommend the materials that will do the job best. We give him the approximate cost. If he decides to go ahead, we make a careful estimate.

"We help our customers to locate their buildings. We have a transit, and we go out and give them grades,

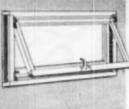
"When the job has gotten under way, we get out to it once or twice to see that the materials are being used as they should be.



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#### ANDERSEN BASEMENT-UTILITY WINDOW UNITS

Packed in cartons, completely set up for quick installation. Includes acreen. Storm sash optional. Modular sizes.





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Ingenious hardware permits hinging of sash at top or bottom. Removable sash can be reversed in a matter of seconds.



#### MANY ABOVE-GROUND USES

In stack or ribbon groupings, or singly, this Andersen unit has many aboveground uses. Ideal for cabina, garages, farm and commercial buildings.

 Specification data on Anderson WINDOWALLS is in Sweet's Architectural and Buildors' Catalogs or will be sent by us upon request. See your local lumber or millwork dealer for further information.





Windowalls

ANDERSEN WINDOWALLS\* are precision wood window units manufactured by the Andersen Corporation, Bayport, Minnesota. They provide all the advantages of uood windows at their best...wood that insulates, wood that blends with the home.

\* TRADEMARK OF ARREDUCE CORPORATION

Anderson Corporation . super, wim. . Window Specialists



HOUSING projects of this type, which will be owned and rented by public outborttee, are the bulk of building in Britain today

## Mister 'Iggins' 'Ouse

Britain's building industry has one customer—the government's socialization of the industry itself appears to be next step on timetable

By W. H. Schmidt, Jr.,

Corresponding Editor

GOVERNMENT is virtually the only house-buyer and is rapidly becoming the exclusive landlord of Great Britain. Hence, the home building industry—as yet privately owned for the most pari—has to get along with a monopoly customer.

Is public housing a good thing for Britain? Two elementary criteria would seem to be: (1) the pace of providing housing, and (2) the relative cost of that housing.

First and foremost it must be emphasized that, today, bousing is a more potent political issue in Britain than it is even here in the States. Politicians rise or fall on how well the public think they get people "under roof." Hence, as may be expected, everybody is paying special attention to the job of building houses; vast sums of public monies are being poured out in subsidies; and materials and labor therefore are accorded special favors. But, despite this concentration of mind and matter, the record is not nearly as good as it was before the war.

At the present time, when housing is a national issue, fewer than 200,000

"houses" (dwelling units) of a permanent character are being produced in a year. Back in 1938, when there existed no appreciable shortage of housing, the private builders built and/or sold off some 350,000 houses. (In the United States, with three times Britain's population, only 406,-000 dwelling units were produced in 1938.) And virtually all of these houses were for private owners and without subsidy, for public housing had, for some years, remained static under a conservative government regime.

It is estimated that 750,000 dwelling units in Britain were destroyed by enemy action in World War IL. Furthermore, for six long years of war, no new home building was possible. And, as in the United States, population growth and a flurry of postponed marriages further deepened demand. Yet, in the entire four years from V-E Day to the end of June, 1949, only 528,000 permanent-type houses were produced in Britain, or an average of 132,000 a year. Compare this with 350,000 built in 1938! (Government propaganda claims that

almost one million dwelling units were provided in the four-year period, but of these, 473,000 units were of temporary construction, the result of conversion of existing buildings, requisitioned empty private properties or abandoned military hutments—leaving 528,000 as the actual comparable production of the period.)

#### Cest Colossal, Tee

Not only is the rate of building poorer than prewar, but the over-all cost is very much greater. In terms of the Englishman's low average income it is colossal. It isn't necessary to take the word of a conservative for this: In 1948 the so-called Gird-wood committee of inquiry reported to the socialist minister who appointed it that the cost of the average dwelling unit in a public housing project had risen from about \$1600 prewar to \$4800 in 1948, or three times.\* And unlike the building (Continued on page 194)

<sup>&</sup>quot;All dollar values in this article are based on the old rate of four dollars to the British pound sterling, as representing more accurately solut princes mean to the average Englishman's packethook than would the new rate of exchanges."



## R.O.W Removable Wood Windows

#### (1) can work both sides indepent\*

They had looked over a number of attractive human. All had the usual "Manner" mergage appliances. Then they were shown a home with an extra numering—R-O-W wood windows that are REMOVABLE. That closed the sale. The sales appeal of R-O-W REMOVABLE windows cases little or no more than ordinary windows. R-O-W's spring cashion action assumatically adjusts for overling and shrinking caused by weather changes.

GOUN FOOR MAINES IN 1885. Commune occapione for E-O-W Windows has been build by notional advertising in BETTER HOMES & GARDENS, AMERICAN HOME, and SMALL HOMES GUIDE. It's the window wamen was: commenced to the commenced in the commenced properties of the play helps are available to make your home selling easier. Fill out and mall the compute solely for more benefits complex and more information about the word window.



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See R-O-W Windows at the 1999 National Association of Home Baildon Show, Boath No. 81. See Sweet's Aschimetoral or Baildon Fife. When in New York see R-O-W at Archinects Sample





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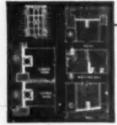


Here is "finger tip" control for your clients and a maintenance free unit that does away with all double-hung window trouble. Wood nash are the best windows when properly installed and the Master He-Draft spring bolines in a proven combination which sever money and time in installation and a definite selling feature for home aways.

The Moster such unit is quality equipment fabricated from non-corrective mated and may be had in staintess steel for locations subject to soit air.

For new or old window installation get the facts today. Sand coupes now,

With the Moster Such Balance booth at the Matienal Association of Home Builders Show at the Stevens in Chicago, Feb. 19-23. We'll be in space 117 and will be glad to demonstrate our product.



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#### Mister 'Iggins' 'Ouse

(Continued from page 192)

prices in the States, which have dropped somewhat during the past twelve months, coats in Britain have climbed steadily upward since the date of the Girdwood report—some estimate as high as 10 per cent.

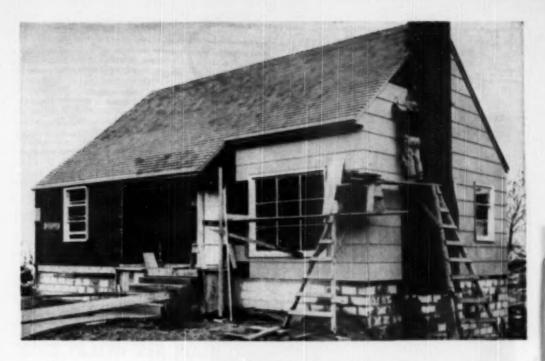
This increase is not-as may be supposed-due entirely to increased labor and material costs. If the cost of housing be related to national income, differences in prices and wages are automatically cancelled out, because the cost of housing is measured in terms of its effect as a charge on the whole economy. In 1938, according to the Girdwood report, 29 per cent of the national income of Great Britain was invested in the building of new houses. Today, 2.6 per centor a little less proportionately-is being invested. But the nation is receiving back only 56 per cent, of the number of houses it enjoyed in 1938. So the burden is about the same, but the yield has been cut in half,

Comparison of absolute costs of British and American houses is impossible because of wide differences in wages and standards of comfort. But an important British builder, with experience as a contractor in other countries (including the United States), estimates that the cost of a new house in Britain is about five times the annual income of its renter or purchaser, compared with only two-and-onehalf times his annual pay in the United States. In short, to get a roof over his head, the average Britisher must pay out, proportionately, twice what it costs his American counterpart. And this does not take into account, of course, the fact that his bouse may lack such ordinary American amenities as central heating and concealed plumbing.

#### Government Extravagant Customer

British builders interviewed by the writer attribute an important share of the decrease in production rate and increase in cost of housing to the fact that the government is the principal customer of their industry. Shortly after it came to power in 1945 the Labor government instituted a peacetime system of licensing, under which a person ordering a new house or any substantial improvement or addition to an existing building has to obtain a license for the job. For this permit he has to go to his local housing authority which is directed to issue permits for private owners at a ratio of one house for every four built for public ownership by the authority itself. This ratio, it must

(Continued on page 196)



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#### This unique new building material makes money for builders, saves money for homeowners.

You'll be happy when you discover that by using Weldtex Siding you can do quality work quickly...at a saving.

Made of patented 3-ply Weidtex Striated Plywood in exterior grade, these modern siding panels are pre-cut to 48" long by 15%" wide and %" thick. When you consider only 22 of these panels cover an entire square of surface, you get some idea of the speed with which you can work using Weldtex Siding. And the finished job is weathertight, with a minimum of seams and strikingly handsome.

Homeowners will like the fact that they get a beautiful exterior that adds to the value of their home...yet which shows them important savings.

Weldtex Siding takes paint and other exterior finishes perfectly. It's approved by the FHA on Federal Housing jobs. And can be used over any type of sheathing, or fits perfectly on 16" studs. We suggest that you use 1¼" hot-dipped galvanized finishing nails spaced 6" on center horizontally, 4" on center vertically. A 2" lap prevents water backup.

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#### Mister 'Iggins' 'Ouse

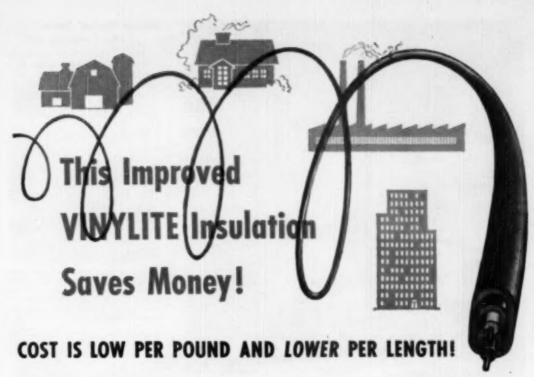
(Continued from page 194)

be emphasized, is a ceiling-not a floor. The fact of the matter is that no housing authority, whatever its political beliefs, has any incentive except to turn down most private requests, so that it may get scarce materials and labor to build its own empire and satisfy as speedily as possible an electorate clamoring for shelter. A civic official of a highly conservative and well-to-do town, who would be a Republican if he lived in the United States, told this reporter that local governments have no course except to extend public ownership of housing further and further; the attitude of the Minister of Health-czar of housing in Britain-leaves them no choice. For some time after the close of the war-despite the one-to-four discrimination against building for private ownership-the builders turned out slightly more houses for owner-occupiers than they did for the public authorities, chiefly because, having more freedom from red tape when dealing with private customers, they were able to maintain a far greater "production rhythm" for private, than for public, houses. Early in 1948 the Minister of Health ordered local authorities to issue no more private licenses until their own quota had been filled.



ALTHOUGH opertment house living is not as popular in Britain as it is in the United States, and the socialist government invors the extension of "green belts" around the big cities, certain of the public housing projects today are of this modernistic, multiple-story type

This writer was able to find no statistics breaking down into private and public ownership, respectively, the total number of houses built since the war. But two random samples of individual area statistics indicate to how great an extent government has become the building industry's customer. From the end of the war to June 30, 1949, there were completed in Doncaster, an industrial city in north England (population 97,000), 688 housing authority houses, compared with 209 for private owners. As of June 30, 1949, there were under construction 202 public houses, against only 51 private houses. During the same period the housing (Continued on page 198)



Even better in performance—and lighter in weight—than comparable insulation materials is a recently developed VINYLITE Plastic insulation for general-purpose building wire.

Because this VINYLITE Plastic insulation weighs less than others—each pound goes further, cuts cost of the improved wire.

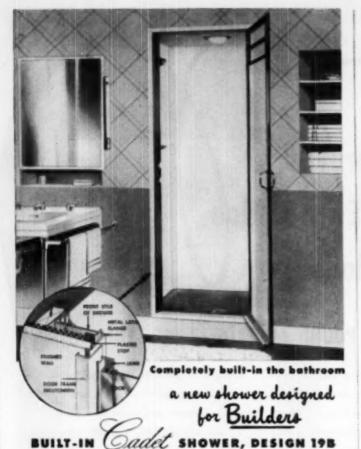
Electrical and physical properties given to wire by this new insulation are excellent rated by Underwriters' Laboratories as suitable for Types T and TW, and for exposure to oil up to 140 deg. F. (60 deg. C.).

Other important qualities are low-temperature flexibility, resistance to high-temperature deformation, water and oil resistance, in addition to the other VINYLITE Plastic insulation advantages of long life, easy pulling, small diameter, and permanent colors.

Some outstandingly successful uses of wire insulated with the improved VINYLITE Plastic include general-purpose building wire, as well as insulation and jacketing of fire alarm and telephone systems. For full information, or names of manufacturers, write Dept. HK-64, today.

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... with Precast Terrazzo Receptor

Completely recessed, door flush with wall of bathroom, no exposed metal panels.

Beautiful in appearance—clean interior, no acrews or projecting fastenings to mar the bright white, smooth enameled finish.

Permanently water-tight-no mortar joints to crack and loak.

Installed cost is much less than tile or other built-on-the-job showers. Only one trade required for installation.

Size, 36" x 36" x 80"—curtain or zephyr door as illustrated, bonderized, galvanized steel walls, bakéd-on synthetic white enamel—will not rust.

Install a Fiat 198 Codet on your next job. You will find this shower readily accepted by home buyers.

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| bothroom floor | olog of Flot Showers, Basspters and Doors. Also builders<br>plan sheet.  |
| NAME           | and the second s |
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#### Mister 'Iggins' 'Ouse

(Continued from page 196)

authority of Aylesbury (population 20,000), some 40 miles distant from London, completed 508 houses, compared with 72 houses completed for private owners, and had under construction 182 houses, compared with just 2 being built for private use.



UHIORS to which these employees belong favor nationalization of the home building industry. Behind these men is a form mold for the construction of houses by the "no fines" concrute process, wherein walls are poured on the site.

Under the Housing Act of 1946 nearly one-half the cost of building and maintaining authority houses in Britain is paid for by the taxpavers. Of this subsidy, three-quarters is borne by the national treasury, and the other quarter by local property owners. This burden is not "onetime"; it will go on as long as the buildings and present law exist. That subsidization of this proportion does not make for economy or wise expenditure is self-evident. The Girdwood report points out that, while the average cost of a public-owned dwelling unit in 1947 was \$5,600, the maximum allowable cost of a private unit was \$5,400.

As shown above, building for public authority is much slower than for private buyers; the Girdwood report admits it. Plans by government hodies cannot be changed quickly in response to variations in supply of materials, while private builders erecting for sale to individuals-as demonstrated here in the United States-can marshal labor and materials with great flexibility and keep up production rates even in time of short supply. There is ample evidence that the red tape associated with the building of houses for public authorities only compounds and intensifies the delays and high costs in all British building resulting from administrative restrictions.

Says the National Federation of Building Trades Employers on this score: "The experience of the past (Continued on page 200)

American Builder, February 1950.



American Builder, February 1950.



## Luxury Look ... How to build-in the Economically

Partitions of Blue Ridge Patterned Glass can be used to add appeal to even the smallest house . . . build-in luxurious decoration for two rooms at once. And you save on papering and painting!

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finished for greater obscurity. Ask your L.O.F. Glass Distributor about it. You'll find it surprisingly inexpensive . . . practical even on modest building budgets.



#### Mister 'Iggins' 'Ouse

(Continued from page 198)

few years makes one thing abundantly clear-namely, that low cost building and high productivity are not possible in a situation in which most things which the builder requires or wishes to do can be obtained or done only by virtue of a license or official fiat. Living from hand to mouth in this manner makes forward programming of any job or series of jobs very difficult, if not impossible, and very much increases overhead costs." The official Girdwood Report itself points out that, "The difficulties of obtaining



SOME 472,000 dwelling units built since the end of the wer in Britain are of temperary construction

labor and materials, the necessity to comply with various controls and the numerous and detailed forms, records and returns now required, have all necessitated not only more staff but staff of higher qualification and with higher salaries than in prewar days."

#### Town & Country Planning Act

And that ain't all," as the barker said. Superimposed on the whole maze of restrictions and licenses and ratios designed to ration labor and materials is the Town & Country Planning law, which places in the hands of a Central Planning Boardappointed, paid and directed by a Minister of Town & Country Planning-dictatorial powers over the use of all land in Britain. This enactment of "The King's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons" says, at the outset, that it is designed "to give power of control over the use of land" and to "secure the recovery for the benefit of the community of development charges in respect of certain new development." In plain language, the government has the power to prescribe whether a plot of land should be devoted to agriculture, roads, recreation, timber-growing, residence, or garbage-dumping, and to tear down, reconstruct or build-or order any of those things to be done-any house or other facility, by whomever owned, to gain this

(Continued on page 202)



The quickest, easiest, thriftiest way to give your homes STRIKING EYE APPEAL FROM THE STREET is with the new Crawford Marvel-Lift Stylist

Here's a brand new, patented construction, garage door that gives you unlimited scope for putting brilliant, striking, eye-arresting PERSONALITY into EVERY home at trifling extra cost.

Any design, traditional or modern, that you or your client may fancy can be applied to the STYLIST by means of stock moldings combined with beautiful color acheines. The same design can be repeated on front door and shutters, if you wish, and you can easily imagine what a stunning effect such a novel and colorful ensemble will produce.

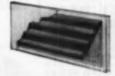
For the FIRST time, you and your customers can have decorator's custom styling in a ready-built, popularpriced garage door. And you can make this styling the basis of an over-all decorative scheme that will make every home you build a standout for STYLE and PERSONALITY.

Every house can be different, distinctive, individual, and your prospects will SEE this immediately. This is a sales advantage that alert builders will grab and go places with. As you can see, it costs almost nothing extra, but what it adds can be worth plenty. Lights are available on factory orders. Call your local Crawford Door Sales Company listed in your Yellow Pages. Dealerahip inquiries are invited.

Visit Booth 39 at NAHB Show at the Hotel Stevens



The STYLIST clides up inside the garage, cale from



PATENTID INDICIDES COST OF S-PLY HARD-WOOD is imminered and molded to shape under 390,000 lbs. pressure at high temperature produing pertennent undergrand band. Blacks are hulls to far lacks other side.

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#### Mister 'Iggins' 'Ouse

(Continued from page 200)

And further, the government may collect from any individual whatever it deems represents the increased value of his land resulting from whatever cause. In short, if a builder should seek to develop a real estate project on land hitherto used as pasture, the government may order him to pay, in cash, a sum representing the difference between the value of land as farm soil and as a residential plot. It is said that this sum may run as high as \$1000 a house—constituting a price increase of as high as 25 per cent.

While this pernicious act seems to place a great deal of responsibility for its administration on local authorities, the centralized Ministry actually wields the stick. Whatever its political tenets, local government is not allowed to refrain from socializing the land. The Act says the Ministry may, by mandamus, require a local authority to acquire land or carry out "any development which, in the opinion of the Minister, ought to be carried out." And, if the Minister is in a frightful hurry, in acquiring land or facilities he doesn't have to wait for the legal period of negotiation to expire. And payment for land acquired, or to recompense for depreciation to private property resulting from government development schemes, may be made in government stock-which, at the present time, is subject to serious fluctuations in

There are other controls—too numerous to mention. One, for example,—the Buildings Restriction Act of 1946—allows "any officer of an authority responsible for enforcing a building law or planning control" to "enter any premises at all reasonable hours" to find out if any work is being carried out contrary to planning control or to obtain information for local housing or planning authorities.

#### Output Falls

An important factor in high cost and low output in Britain today is that, while the labor force in building is about equal to what it was in 1938, its output is only half. The reasons are not hard to find.

Britain suffers from over-employnient; there are more jobs than workers. No one needs to work to establish a good reputation so he won't be the first employee to be laid off.

There is too little difference in pay between skilled workers and unskilled laborers. In general, the lowest-paid building employee gets about 80 per cent of the rate of the most skilled.

(Continued on page 204)



#### TO CUT BUILDING TIME?

It's simple and easy to cut down the time needed to build any structure. To do it requires no change from conventional methods. A simple system of coordinating the sizes of the materials that go into the job is all that is needed. Known as medular design, this system is now the national standard. Building materials are sized



on a 4-inch "module" or unit of measurement to save time, labor and cost in construction!

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WITH MODULAR DESIGN! Wood has always been the ideal material for windows, sash, frames, screens, storm sash and other woodwork products. Warm to the touch, wood insulates against heat and cold. Easily painted, stained or varnished, it holds finishes lastingly. Woodwork products are moderate in cost—precision made for quick installation. Toxic preservative treatment at the factory enhances their long life—provides extra resistance to staining, decay, insect attack or humidity. And today, leading woodwork manufacturers add an EXTRA advantage—MODULAR DESIGN!

## ANSWERING YOUR QUESTIONS ABOUT MODULAR-SIZE WOODWORK



## Q. HOW DOES MODULAR DESIGN HELP ON THE JOB?



In installing windows, for example, there is ONE standard opening. This opening takes any design of modularsize window. There's less cutting, less trimming, less waste of material.



## Q. WHO STANDS BEHIND



Leading organizations in the building industry such as the Associated General Contractors of Associa-American Institute of Architects and Producers' Council endorse modelar design. The U. S. Housing & Home Finance Agency recognizes modelar coordination as a cost reduction system.



#### Q. ARE MODULAR-SIZE WINDOWS EASY TO OBTAIN?



Yes. Modular standard windows, window frames and screens are fast becoming available in all localities, thus simplifying specification procedure and assuring a ready source of supply.



#### Q. HOW DOES MODULAR DESIGN BENEFIT THE OWNER?



It gives him more for his building dollar. Modular design also simplifies repair and replacements of windows. In addition, the consumer can get not only his windows but his frames, storm sash, screens, trim, window shades, venetian blinds, etc., in standard sizes to fit modular openings.

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and smooth as silk!





Gar Thin-Wall Installations

Those who know agree on one thing -vanishing doors must be noiseless and effortless to operate. And that is why more and more builders insist on R-W Silver Streak Vanishing Door Hangers and Track ... it's got exactly what they want.

Specially designed for lightweight vanishing doors in thinwall pockets built in standard 2° x 4' studded partitions, Silver Streak is also for use on parallel residential wardrobe doors his or more in thickness. The hanger wheel, made of fine-weave cloth base bakelite, and equipped with high-finish ball bearings, gives longer wear and quiet super-smooth operation.

The track is extra heavy section, hard composition extruded aluminum. Screws are easily inserted, Only rounded surfaces of the floor guide come in contact with the door groove, preventing scraping and assuring smoother quieter performance

For maximum satisfaction and economy, the logical choice is R-W No. 1019 Silver Streak.



Richards-Wilcox Mfg. Co.

#### Mister 'Iggins' 'Ouse

(Continued from page 202)

The Girdwood report itself points to this lack of incentive as an evil, and advises the British to look at American practice. In 1927 more than 24,000 masons were employed in Britain. Today-when the need is incomparably greater-there are only 11,000 available. The trouble does not appear to lie in union restriction of entrants into the crafts; the fact is simply that no man wants to serve a long and difficult apprenticeship learning an exacting trade when he can earn almost as much immediately as a common laborer. In recognition of this need for greater incentive, the National Federation of Building Trades Employers and the leaders of the national super-union of employees have agreed to allow individual firms to negotiate bonus schemes with their employees so as to allow the average worker, by speeding up his output, to earn 20 per cent more than normal. But local union officers look with suspicion on such schemes as "speed up," and, it is claimed, most employers paying bonuses use them to raid labor from competitors, and not to increase production.



LOCAL governments have been in the house-renting business on a large scale since 1919. Those publicly-ewned her in a suburb of London were built in the

Craftsmanship is also below par in Britain. Even union beads admit it. At a recent convention of building trades employees, a high official declared that the dominant need of the business is a revival of craftsmanship: he implored the skilled older heads to pass along their knowledge to "the lads" and to their less-experienced adult colleagues. To illustrate the "don't care" attitude which is ruining British standards of construction: a committee of builders and architects researching new methods of construction for the building industry recently invited a high union officer to send representatives. While entirely sympathetic with the idea, the union officer said it would be futile to do sonot necessarily because the men opposed progressive methods but be-"they just don't give a

(Continued on page 206)



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Mister 'Iggins' 'Ouse

(Continued from page 204) ha-penny." Entrance into the building field during the war of a large number of undesirables—both among employees and employers—to "patch up" bomb damage undoubtedly accounts for some of the low estate of craftstuanship in Britain today. But more important, it would appear to this writer, is the lack of incentive induced by a "dead level" socialist government, which emphasizes rights and needs, foments class war and soft-pedals the aims of productivity and good workstuanship.

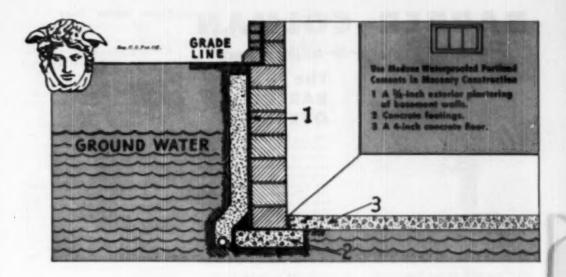
#### Government Against Home Ownership

The most important "fact of life" for the British builder is that his government is opposed to an extension of home ownership by individuals, and seeks as its ultimate goal to have everyone housed in a building owned by a local authority, at a weekly rent. A recent government paniphlet went out of its way to point out - somewhat apologetically - that "home ownership is not however being discouraged" (italies mine), but went on to state that "personal need and not money is the decisive criterion for securing a house," "Need" does not make for individual ownership; it points clearly to authority landlord-

The record is clear. While, as shown, the rate of building for private ownership in the early days of the one-to-four ratio reached or exceeded its proportion, private building has now been discouraged to a mere trickle. No national aggregate figures were available to this reporter, but he added up all dwelling units reported as "under construction," as of June 30, 1949, in all political subdivisions making up metropolitan London (comprising about one-sixth the population of Britain), and found that 27.523 were for the account of borough or town housing authorities or the London County Council, while only 1.782-or six per cent of the total-were for private ownership.

An industry which finds that government is becoming virtually its only castomer—as these figures would appear to indicate—better worry about its future. Yet the British building industry, on the whole, appears quite nonchalant about the fact. Many private architects say they welcome the scope, "social planning" and funds which public housing affords. Unlike most of their counterparts in the States, big home builders in Britain also build large public works—such as dams and docks—and they enjoy big government contracts too much

(Continued on page 208)



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American Builder, February 1950.

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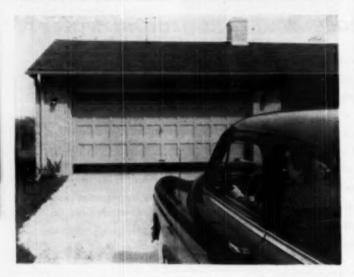


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BARBER-COLMAN COMPANY

Mister 'Iggins' 'Ouse

(Continued from page 206)

to worry about a little thing like public housing. Many of them say, frankly, that they believe in public housing. And, for the most part, British home builders have never opposed the idea of public housing, on the premise that "a little dose of public funds might help the economy—and us".

The seeds of public housing in Britain go back to far as 1890, when local authorities were empowered to provide quarters for slum dwellers, but the power was optional and no national subsidy was involved. Real public housing began in 1919, when the local governments' power became obligatory: i.e. they had the positive duty of providing for the housing needs of the "working classes" not likely to be met by other means, and had call on the national treasury for the purpose. Between 1919 and 1939 one quarter of the houses built in Britain were for ownership by government authorities. When the act was passed, private builders flocked to get authority contracts. At no time, so far as this writer is aware, did they, officially and as an industry, protest this injection of pure socialism into the business of owning and renting houses.

Now they have their reward. Not only is government their biggest customer, and the chief landlord of Britain, but that same government now shows strong signs of taking over the home-building industry itself. For many years certain local housing authorities have constructed houses with their own directlyemployed labor force. Many other authorities employ large staffs to repair the houses they own. Now the powerful building trades unions have gone on record as favoring nationalization of the building and construction industries as a whole, and the government itself throws out hints from time to time that it will some day take over the contractors. Workers are being told that, as public servants, they would have continuity of employment and all the welfare amenities of working for the state. It is true that, for the present-while the "beat is on" from the public for more housing, faster-the left-wing Minister of Health is soft-pedalling his doctrine of "direct labor schemes" and even admonishing some housing authorities which build houses themselves that their production compares unfavorably with private builders. But there is no doubting his ultimate intention to nationalize the house building industry to the same extent

(Continued on page 212)



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Kaiser Homes has built and sold more than 7,000 homes during the past 4 years. In Panorama City, new 2,000 house Kaiser development in the heart of the San Fernando Valley, Schlage locks are being installed in all dwellings now under construction. Fritz Burns states that, "We know the dependability of Schlage locks from years of building experience. During our California building program, we have used over 100,000 Schlage locks in Kaiser Homes in the \$8,250 - \$9,950 price range. They deliver the trouble-free service we want our customers to enjoy while they save us time and money in maintenance and in ease of accurate installation."



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One of the most pressing problems facing all types of libraries today is that of providing adequate space for a constant flow of publications. Periodicals, because of their number and size, pose a particularly difficult problem.

Microfilm makes it possible to produce and distribute copies of periodical literature on the basis of the entire volume in a single roll, in editions of 30 or more, at a cost approximately equal to that of binding the same material in a conventional library binding.

Under the plan, the library keeps the printed issues unbound and circulates them in that form for from two to three years, which corresponds to the period of greatest use. When the older paper copies begin to wear out or are not called for frequently, they are disposed of and the microfilm substituted.

Sales are restricted to those subscribing to the paper edition and the film copy is only distributed at the end of the volume year.

The microfilm is in the form of positive microfilm and is furnished on metal reels, suitably labeled. Inquiries concerning purchase should be directed to University Microfilms, 313 N. First St., Ann Arbor, Mich.

#### in the Next Issue "National Home Week for 1950"

A Preview of Plans of Bolidars, Dealers, Realters

#### Mister 'Iggins' 'Ouse

(Continued from page 208)

he has already brought about the nationalization of the house owning and renting business.

The United States, it would appear, is now at the point in the road toward socialism at which Britain stood 30 years ago in 1919. Here, too, local housing authorities are to be set up to go into the business of owning and renting houses subsidized by a combination of national and local taxes. Public funds are to be poured into the building business. Will the lure of easy money (for a short time) silence the tongues of American home builders-or will they continue to speak out against the idea of public housing? Britain's builders chose the former course. And see what is happening to them.

## real da untile new colors in

Cambridge

lette Folder...handy guide to the profitable use of color in building

to make your houses more beautiful and more salable!

Put beautiful real clay Suntile colors in your kitchens, bathrooms and utility rooms-and watch your prospects say "Mmmm-I want that."

Color-Balanced Suntile is the real thing-real clay tile. (Doesn't merely look

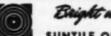
Now, in addition to the long-wearing, easy-to-clean-and-maintain advantages of Suntile, you get exclusive, new colors and color combinations for your residential building.

See these new colors come to life in the Suntile Color Palette Folder. They will stay beautiful, fadeless and sparkling . . reduce repair and reducerating costs ... aid resale value through years of hard wear

That's because Suntile is expertly manufactured and expertly installed. Every job is guaranteed by a man who really knows tile, your Authorized Suntile Dealer.

Write us today for your Suntile dealer's name and for your FREE copy of the new SUNTILE COLOR PALETTE FOLDER. Address: Dept. AB-2, The Cambridge Tile Manufacturing Company, Cincinnati 15, Ohio.





Bright with color · Right for Alfa

SUNTILE OFFERS YOU BOTH . . . BETTER TILE . . . BETTER INSTALLATION

This is the way to balance windows . . . and weatherstrip them too!



#### SASH BALANCE AND WEATHERSTRIP UNIT

Do two jobs at once on any double-hung window. Here is an installation on an economy frame giving an all metal sash run. Or simply "cap" old or new wood parting beads. Allmetal Sash Balance give stable sash — provides finger-tip control — cuts labor and material costs and precides better windows by weatherstripping as well as balancing. Send for complete information appr



#### ALLWAYKE WEATHERSYRIP CO."

2243 North Knax Avenue, Chicago 39, Illinois

Genflemen: Please send me complete information and prices.

-

Address

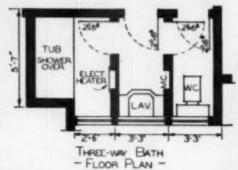
City

## A Three-way Bathroom for Small Houses

Partitions enclosing each fixture in three-way bathroom to provide multiple bathroom conveniences in medium-priced houses with minimum cost is innovation of coast builder

BORIS ELIEFF, builder and contractor for the Southern California Investment Company, has developed a new three-way buthroom which is intended to furnish the convenience of two bathrooms in a house selling for less than \$10,000 (generally with only one bathroom) with a minimum construction cost.

The bathroom fatures of this new plan are parallel, arranged against a common wall. Within the bathroom as a whole, the closet, lavatory, tob and shower stall areas



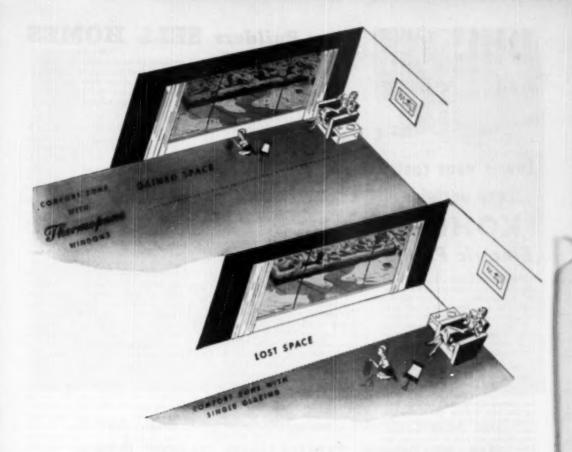
THIS plan could be rearranged for adaptation to any problem

are separated from each other by partitions. In addition, the closet and lavatory spaces have separate entrances from the main hall. Thus, the three smaller enclosures of the bathroom assure privacy for three people simultaneously.

Mr. Elieff has employed this three-way bathroom layout in 30 two-bedroom homes recently constructed in Bell, Calif. for the Southern California Investment Company. The principle involved—that of maximum use of floor space—is a basic one in Mr. Elieff's building. Sliding doors were also used in these residences to eliminate wasted areas. As much space as possible has been made to serve double functions within the houses.



FRONT view of house equipped with the three-way bethroom



## HOW TO Gain Space WITHOUT ADDING IT

You can make small homes . . . small rooms . . . more tempting to buyers, at no extra cost with Thermopane\* insulating glass.

How? By avoiding "low-comfort zones". Make floor space usable all the way to the windows in wintertime. There's no chilly feeling sitting near Thermopane because a sealed-in blanket of air keeps the inner pane warmer.

That extra wintertime living space is something home buyers can readily appreciate . . , it's a real selling "plus" for you. "Sales appeal greatly increased", one builder reports.

If you wish, you can actually save money—cut your costs—by using Thermopane. A 13' x 20' room, for example, might be cut to 13' x 17' without making it look smaller IF you have a window wall to "open it up" to the outdoors. Glaze the window wall with Thermopane and you will still be giving the buyer as much usable winter-time space because there is no "low-comfort zone". And you will find that a Thermopane window wall can be put up for no more than a conventional wall with double-hung windows.

Double-hung, casement and picture windows in wood or metal such are available from your dealer. Some builders in the East have developed special framework for window walls which has been very successful. For a list of *Thermopane* standard sizes, get in touch with your Libbey Owens Ford Distributor. Or write us.





## Lower your costs! ... use portable KOHLER Electric Plants

Use a compact, portable model for small power teels, or a larger model for heavier power requirements, and watch how fast your costs come down! More and more buildors are discovering that Kohler Eisctric Plants quickly pay for thomselves in time and labor saved. Portable models are exceptionally lightweight, economical to operate, and give years of efficient service.

When you build in outlying districts, you can carry your own low-cost power supply with you. Even where there is power-line service you'll save the trouble and expense of arranging a hook-up. During the busy building session shoud, a Kobler Electric Plant will help you handle more jobs, more profitably. Since range from 350 watta to 10 KW. Write today for folder K.9. Kobler Co., Kobler, Wisconsin.



Model 200M26, 250 watte, 11s rult AC, Mensual control. Consensions double correong handle, Length 2015,", width 2514," height 2015, Weight 230 lbs.

## KOHLER KOHLER

Plumbing Fixtures . Heating Equipment Electric Plants . Air-cooled Engines

### How Builders SELL HOMES

EDITOR'S MOTE: This is the last in an exclusive series of articles on sales ideas offered by escapeful builders from all parts of the country. Questions are from letters written to W. P. "Bill" Athenon, who some time aga conducted an inquiry on sales methods used by builders. The first article in the series appeared in the October, 1949, issue of American Builder.

To build confidence among home buyers, "you do for them in the fat years what is expected of you in the lean years," says a Kansas City, Mo., builder.

"To build confidence in the buyers' minds with relation to us and our homes, we started with the first buyer in our addition several years ago. After they had lived in their house a day or two we made a personal call and asked if they had noticed any defects or had any gripes at all. If so, we immediately fixed them. Nine times out of ten a very small item appeared in their minds as a pretty serious item. Most of our prospective buyers are people who know someone who has bought a home from us. When we tell them in our sales talk that we stand behind our product, they believe un," the builder states.

"Another good will feature we use is to always send bulbs or a bush to each buyer for a Christmas present. Also whenever a baby is born we send flowers to the mother at the hospital. From all this we get thank you notes which I have saved in a scrap book. I use these as testimonials and find they are sure fire methods of building confidence."

\* \* \*

BUILDING CONFIDENCE—A builder in East Pasadena, Calif., who also builds buyer confidence through giving immediate attention to complaints says, "One of the nost important things we have developed is a follow-up system.

"When a complaint is made, one copy is sent into the field to the craftsman, another kept in the office. When the craftsman takes care of the complaint, or has a reason for not doing to, he writes it on his slip of paper and returns it, and this is then put in the file. You may ask what this has to do with the selling of houses, but I have found over a period of 25 years that your customer is your best salesman.

"In the present tract that we are just finishing of around 400 homes," he says, "in checking back we found that we have sold over 50 per cent on recommendation of owners already in the tract. Frankly, this has-been our experience down through the years. And while this method of handling complaints involves some

work, we consider it one of the most economical sales angles that we have. It is not perfect, but it gives to the owner a feeling that we are interested in his own individual job and he takes pride in telling his friends that he got a 'good deal.' In this way the recommendations are unbelievably high."

SIZE OF SALES FORCE-"The only other thing that I would suggest for many builders is-overhaul your sales force," the East Pasadena builder continues. "Frankly, we operate on a schedule and perhaps what we believe might not apply to someone who builds 50 to 200 houses and then must dispose of them. We start one house and finish another every day, five days a week, straight through the year. Outside of our sales manager we only have one or two salesmen at the most. The sales manager closes every deal. In this way we are much more able to control statements and promises, if such, made by any of the men. We do not let the salesmen close the deals themselves. The sales manager interviews and makes every deal final. In this way we get away from promises and statements of questionable ethics and such as that,"

\* \* \*

SEVEN SELLING AIDS are listed by a Memphis, Tenn., builder: (1) The application form gives ideals of the community to buyers and enables us to screen for better applicants.

(2) Safety signs are put up in all subdivisions.

(3) A garden club is started in the community under the experienced guidance of a landscape architect.

(4) Sold signs are put up on homes as soon as contracts are signed.

(5) Community spirit is emphasized by guidance in economics in home owning through competent advice to buyers on the best use of limited expenditures to make the home more desirable.

(6) No repairs, except emergency, are made by the organization except upon receipt of letter from owner. This encourages the buyer to "feel wishes are being granted," says the builder, and it "eliminates trifting complaints, and enables us to have an

(Continued on page 218)



### NOW...See How the Keystone System Helps You KEEP YOUR BUILDING PROFITS UP

These days the builder who "goes one better" than the next contractor has an edge when it comes to turning his time and money into profits.

That's where this 44-page Keystone System Book helps you. It suggests how you can build attractive houses at lower cost... and still add the extra features that appeal to home buyers. It gives you the reasons why building with modern reinforced concrete succo makes good sense. It tells you how you can build succo

houses that are strong and durable... by using the Keystone System and Keymesh Reinforcing.

Contractors and trade authorities say that the Keystone System of Stucco Application is the most helpful guide to better stucco application they have ever seen. It's certain to be of value to you—whether you are building stucco homes now or may build them in the future.

Write for your free copy of the Keystone System Book today.

#### Keystone Steel & Wire Company

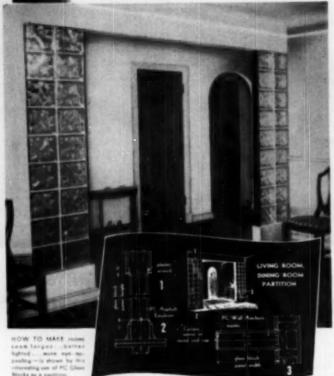
PEORIA 7, ILLINOIS

Manufacturers of Keymesh Reinforcing . Wolded Fabric . Tie Wire . Nails

Modern, Durable Stucco Calls for KEYMESH



#### Give your homes more "come on" with PC Glass Blocks



AND WHEN YOU DO, you'll find, as many bushlers already have discovered, that you've given your home the cairs unless that buyers are looking for.

One way in which you can utilize PC Glass Illocks to turn interest into sales a by installing a few of them as a partition between rooms. Light in this shared by both rooms—by day or night. Besides, PC Glass Illocks give home buyers actual money-naving advantages. Repairs or replacements are seldom needed. There's no painting involved. Having more than raice the insolating value of single-glazed windows, they don't require storm asaly when used in

exterior panels. They're easily cleaned, too.
And, being non-transparent, they assure
complete privacy, wherever applied.
Why not get all the details by filling in

Why not get all the details by filling in and returning the coupon for a copy of our descriptive, fully illustrated booklet. It's free and there's no obligation on your part. Do it now.

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| <b>Brigs</b> |     | MIT From |   | 800 |         |   |          |
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| (in          |     |          |   |     | lices . |   |          |



Microburnel by Pittelourgh Plate Glass Company; by W. P. Fuller & Co. on the Public Coast, and by Robbe Glass Ltd. In Commis.

#### How Builders Sell

(Continued from page 216)

efficient, economical system of taking care of small complaints,"

(7) A maximum of legitimate publicity and a minimum of advertising is used.

\* \* \*

A FURNISHED HOME in the project helps sell, reports a Buffalo, N.V., builder. His average priced homes, with three bedrooms, are on lots that are fully graded, seeded, and landscaped. "We spent quite a lot of money on shrubbery and landscaping (in a recent project), and put in some good sized shade trees along the streets. We had one of Buffalo's largest department stores furnish the house, and they furnished it on a budget, in other words, kept their costs down. They advertised it in the papers and over their radio program and we, too, did the same.

"We spent a considerable amount of money advertising, and the results were that we sold 47 houses in about six weeks, and the department store told us that they felt it was a very successful undertaking for them.

"Otherwise, our sales effort is confined to keeping a finished house always available, plenty of signs directing people as to how to find it, and some interesting, readable classified advertisements pertaining to the house and the development,

"We think a furnished house is probably the best way to sell houses over anything we have tried."

\* \* \*

HANDLE EACH HOUSE IN-DIVIDUALLY-"I feel one thing that has aided in the rapid and successful selling of our homes," states an Albany, N.Y., builder, "is that we handle each house individually as far as selling is concerned. We do not use a model house or show any house before it is entirely completed; this includes all decorating, grading, lawn, sidewalks, etc., ready to live in. We then hold open house for this particular property by using newspaper display ads containing a picture of the house, and talk only about this house to all prospects. By this method we sold all of this year's production, except two, the first day they were of-

EMPHASIZE COLOR — "We emphasize color in all our homes regardless of price," says the Albany builder. "All rooms, except kitchens and woodwork coloring blended with the background of the wallpaper. Kitchen ceilings are painted in gay tones. Bathrooms are

(Continued on page 220)

## See... What Every Builder Wants...



Every builder wants to win the warman's favor because she's the one who decides which new home to buy. She hates noisy bells and kitchen smells which make her home unfriendly. She loves the warm, friendly tones of a NuTone Door Chime—and the sweet, fresh kitchen air that a NuTone Kitchen Ventilating Fan provides. Sell more new homes faster by appealing to the warman with these NuTone home features she loves and wants.



In 1950, millions of women are going to hear about "Noisy Bells and Kitchen Smells' in NuTone's tremendous national advertising campaign, Plan NOW to have NuTone Door Chimes and Kitchen Ventilating Fans—as well as NuTone Electric House Numbers, Luminous Pushbuttons and Transformers-in all your new homes. Ask your Architect or Wiring Contractor to include all these NuTone homeselling features in their estimates.



Pushbuttons



unnformers Electric House Humber

FREE CATALOGS ON REQUEST NUTOHE INC., Medicon & Red Senk Dupt. AR, Roods, Cincinnali 27, Ohio.



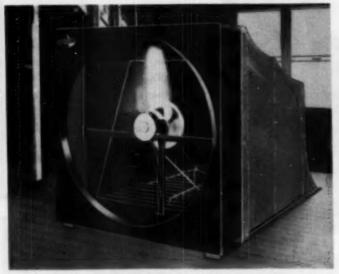


### LOWER PRICES

on Emerson-Electric

#### **BALL-BEARING ATTIC FANS**

for vertical or horizontal installation





Substantial price re-ductions on Emerson-Electric's complete line of ball-bearing Attic Fans make a complete Home Cool-er Fan installation a

better-than-ever investment in sum mer comfort for your clients in 1950!

Equipped with ball-bearing motors special ball-bearing pillow block shaft mountings, these powerful fans are designed for 5000 hours service without re-lubrication. They offer exceptionally long, quiet ser ice, in addition to ease of installation. Built to run efficiently, when mounted vertically, horizontally or at any angle. In low attics, a space of 21/2 feet above the joints is sufficient for vertical discharge installations. Available in blade sizes 30°, 36°, 42° and 48°, with capacities up to 19,350 cubic feet of air per minuse. Save half the installation cost on this tested, economical home cooling system for your clients, by installing it during original construc-tion! See your electrical constructor or write for Home Cooler Fan Bulletin No. 404.

#### SPECIFY EMERSON-SLECTUC KITCHEN FAMS

see feer with a Kitch



THE EMERSON ELECTRIC MFG. CO. . St. Louis 21, Mc

#### How Builders Sall

(Continued from page 218)

painted to harmoniae with the general color scheme. Exterior colors are varied, even to the point of mixing hybrid colors. This idea has been extremely successful.

"Some feature in each house has been advantageous to us," be reports. "In our lower priced houses we supply some one extra feature-a built-in dressing table, a corner china cabinet or a special attractive shelf in the kitchen for toaster or phone, etc.something different in each house.

FLOOR FINISH A FEATURE "One thing that has more or less become a trade mark for our homes and which we strived and weeked towards is the floor finish. This is a must. I insist upon it being done my way, and it has paid off. We will get several hundred people through a home on an "Open House Sunday." and I will say without fear of doubt that a high figure of three will not comment on the floors. We use all select red oak and I personally supervise all finishing. This I believe has been the most successful idea.

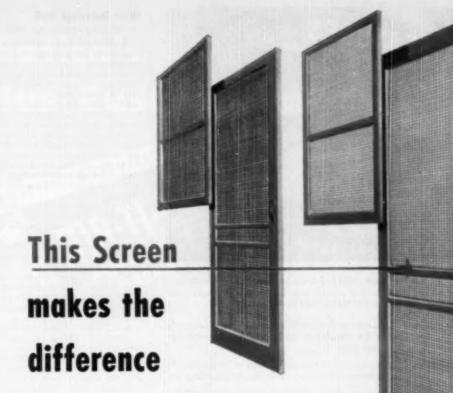
"One other successful idea," he concludes, "is the use of trees. We are favored in one particular development with very beautiful trees and a great quantity of them. We make it a point during excavation and grading to be somewhat careful and cautious so that every possible tree may be left standing. We let the owner decide if there are too many and then cut them as he desires,"

PERSONAL CONTACT SYS-TEM-"Our most successful method of selling is through a personal contact system," says a Beloit, Wis., builder. "As we receive inquiries regarding homes we get as much information as possible regarding the party and type of home wanted; the number of rooms wanted, type of heating plant, whether or not an attic is required for future rooms, number in family, where employed, possible price range they are interested in. If we are unable to sell them at the moment we put a card in our file and later drop them a line or if possible telephone them regarding a home being completed which meets their particular requirements. In a small city our size, we find that people like this personal touch.

\* \* \*

A Burlingame, Calif., builder suggests seven main aspects of selling homes, with alternative methods to use if these basic aspects are not suffi-

(Continued on page 222)



you'll sell door and sash units FASTER with SCREENING woven of

Firestone Velon

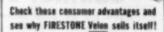
Tough, lightweight Firestone Velon makes the difference in the life and the shape of the screens you sell... in the volume of business you do. Velon can't rust. Velon is resilient, won't stretch out of shape. Whether you make up your own sash and door units or stock them readymade, be sure to specify this superior screencloth. Three colors—aluminum grey, forest green, bronze brown; 11 widths; priced right for cooperative selling.

For full information and samples, ask your supplier or write either of these authorized weavers:

SWIFT MANUFACTURING CO., COLUMBUS, GA.;

PLASTIC WOVEN PRODUCTS, INC., S1 CAMBEN ST., PATERSON, N. J.

Provident



- · Rust and correction proof
- · Connot "bleed" or stain the
- Never needs painting or varnishing
- Tensile atrength, averaging 33,000 or more pounds per square inch
- Will not deat, bulge, or break under normal impact
- Resists our fading—connot be damaged by salt water, industrial smoke, dirt, greass, most acids and alkalies
- Velon cuts with a scissors leaves no skarp ends



When you plan the building of a new home or the modernization of an old kitchen, you can be sure that you will please your clients, if you consider these three important features:

- Beauty . . . . because the housewife wants the hours she spends in her kitchen to be in cheerful, colorful surroundings.
- Utility . . . . because she wants the kitchen to be sanitary in order to reduce kitchen drudgery to a minimum.
- **Durability**. because she wants her investment to give her a lifetime of service and satisfaction.

### Just Line Radiiluxe Custom Built Stainless Steel

#### **Cabinet Sinks and Tops**

give her all these advantages. In addition, they harmonize perfectly with any color and decoration scheme and add the final touch of elegance and refinement to any modern kitchen.

#### Note these Exclusive JUST Radiiluxe Features:

- · Custom Built to meet every Personal Taste
- · Patented In-Built Anti-Splash Rim in bowls
- · Patented Double Pitched Drainboards
- Segmless Electrically Welded Construction
- · Rounded Corners in Sink Bowls
- · Die Formed Raised Edges
- · U-Type Steel Reinforcing Channels under Drainboards
- · Sound Deadened Drainboards and Bowls

Write today for Illustrated Literature B-2 and Name of Nearest Factory Representative





#### How Builders Sell

(Continued from page 220)

- Select the best possible location that can be secured with the price range desired.
- (2) Have an architect, or other competent designer, prepare a compact but livable plan.
- (3) Prepare adequate specifications to insure that maximum value will be delivered at minimum cost.
- (4) Train a good construction crew to secure maximum efficiency in turning out a really well built home.
- (5) Be sure that the price of the finished product is strictly competitive with other homes of like quality and location.
- (6) Arrange the best financing possible so that no one can offer a better deal as to down payment and monthly payments.
- (7) If the foregoing program is not sufficient to bring in the prospects, then:
- (a) In addition to tract sign loards, start classified advertising.
- (b) Start model homes, changing location and style of model homes as required.
- (c) Do some display advertising. (d) Start "putting the heat" on salesmen to: "Contact various home owners, to whom homes previously have been sold in various tracts, to get a list of their friends who may be interested in securing a new home. Secure prospert list through other sources-friends, business acquaintances, and clubs. Chambers of Commerce in our various communities publish lists of newcomers and indicate whether they are renting or purchasing. Renters are prospective purchasers and may be contacted through the mail or by telephone. Our advertising may point out special features, such as 'an expandable house.' We try to point out desirability of the new homes with larger windows, better accessibility to gardens, advantages of ranch type homes, and all of the other ideas we think of to coax a family out of the rented apartment or old home into one of the new modern homes we are creeting."

#### READ

"Prefabricated
Homes Up-to-Date
and Down-to-Earth"
MARCH, 1950
American Builder

YOUR SENT PREY WAY WAY TOURS ON WAY

### Matico's Low Initial Cost Plus Ease of Installation



Here's how low-cost MATICO makes

in 18.0 year alread expressing in these or any cutshing transity. MATSCR is subsequentially a large enduring policy. It is ideal for every totalise use and each to extery installed over totalise slobe in direct contact with the ground. You just con't bury better thangs than MATICOL.

#### MATICO Bears the Good Housekeeping Seal of Approval



This seel ... nationally tamous ... will instill untold confidence in the mind dence in the mind

of the buyer of a house floored with MATICO. It is your guarantee of satisfaction as well.

#### MATICO Consumer ods in 1950 In Leading Magazines



Full color adverhisments schoduled to appear in the Saturday

Evening Post, Better Homes and Gordens, Good Housekeeping, etc., will create a decided demand for MATICO.

#### Exclusively MATICO -5 New, Light "Petal Tones"



The most exciting innevation in color-styled floors "Petal Tanes" are today's sensation of the

notion. Also 22 other attractive colors in the MATICO line, both solid and morbleized.

MANUS MATICO PLOOI DISTALLATION SATY!

Resident workering in simple stop-by-size and to how to install a MATICE floor. Sh

Matico

the new asphalt tile

MAIL

Mastic Tile Corporation of America, Newburgh, N. Y.

Please send complete MATICO "5-Minute Entruction Kir" showing were of installation of MATICO exphain tile flooring. Enclased is 10 cents to cover mailing.

Mama

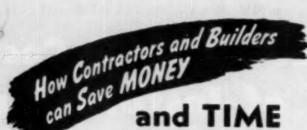
Address

City

State

AR 2-91

MASTIC TILE CORPORATION OF AMERICA



on Every Window Opening

Savings of \$5 or more per opening are reported from many projects. And the time saved on a job may mean the difference between profit and less. The fact that two carpenters can set 64 frames in an 8-hour day indicates the speed of work.

One-der Window Frame is

Pending

One-der Window Frame Frame for metal sash

Works with Casement, Double-Hung or Awning type Windows and in any type of wall construction

The window buck is built around this one-piece rigid frame and set in the stud wall. No fitting or adjusting is necessary.

The frame carries its own flashing outside and continuous weatherstripping flange inside. It requires no trim, inside or out; no plaster or

wallboard returns; no finished carpentry.

The unit comes Bonderized and with a prime coat baked on. Only one coat needed to finish. Thus it saves twothirds on cost of paint and another two-thirds on painting labor.

#### See it at Chicago!

National Association of Home Builders Annual Convention, February 19 to 23 Congress Hotel (New Products Division)



Meantime, see your Dealer or write

ONE-DER WINDOW Sales Company

2109 Third Ave., North

Birmingham 3, Ala.

#### Advertising . . .

(Continued from page 145).

needs; (c) results achieved, and (d) reasonableness of production

J. Obtain an "outside" opinion from advertising executives employed by publications in which the agency customarily purchases space.

At this point, the builder who erects less than 20 units a year, may comment: "This may all be very fine for the big development fellows, but what reputable agency will give a dam for my business?" If this builder has in mind the mammoth agencies, whose tremendous overhead forces them to snicker at any account billing less than \$250,000 a year, he is right. But there are literally hundreds of smaller reputable and recognized agencies which would welcome his account.

Our own agency, Town Advertising Associates, handles several of the largest builder accounts in the New York metropolitan area, whose combined annual billing runs well into six figures. At the same time, we handle much smaller accounts. On some of them we lose money, but more than make it up when one of these little fellows goes on the big time, taking us right along with him. Some of the most treasured "oaks" in our office were once "acorns." The same holds true in scores of agencies throughout the country, where far-sighted managements will take all the "acorns" they can get.

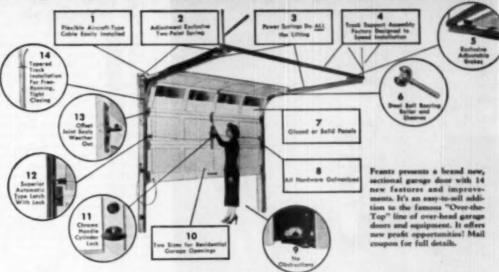
#### What Agency Can De

Hence, at no extra cost except for production charges, the small builder can avail himself of expert advertising counsel and help. His agency, if he has chosen wisely, will give him up-to-minute facts on the comparative pulling power of various publications and other media under consideration. It will assist him in arriving at a sound formulation of his advertising hudget. It will shoulder-in expert fashion-all the creative tasks. In short, a good agency will make the builder's advertising dollar work overtime.

It is on the creative end that the agency's value becomes most apparent. Many builders, who place advertising direct with publications, entrust this task to space salesmen. With all due respect for these fellows-some of our best friends are space salesmen-they are, for the most part, neither copy writers nor artists, and they probably will be

(Continued on page 226) American Builder, February 1950.

#### NEW SECTIONAL TYPE OVER-THE-TOP GARAGE DOOR 14 WAYS A BETTER BUY



- 1. Flexible, rust-peoof, aircraft-type cable. Factory assembled for quick installation.
- 2. Perfect door balance obtained by two-point adjustment (end of power springs and by clasin on cable),
- 3. Turn of handle releases lock and door automatically rises to full open position.
- 4. Rigid steel framework anchors springs, spaces track correctly, and controls brake pressure.
- 5. Adjustable brake prevents door clamming or rebounding. Steel corner plate protects door.
- 6. Ball-bearing rollers with floating axles provide easy, bind-free operation.
- 7. One section of 4 panels open for installation of glass or plywood.

manufacturer of over-head garage doors and builders' hardware. It's completely now in more than a dozen ways. The new No. 200 is easier and quicker to install, less costly to buy, and more satisfactory in service than ordinary sectional doors. Get all the facts at once . . . coupon brings installation details and specifications.

- All hardware (except springs and angles) are coated with rust-resistant zinc or galvanized finish.
- Q. Opening is completely clear when door is open. Only 131/3" of headroom are required.
- 10. Doors are available for openings & wide x 7' high and 9' wide a 7' high.
- 11. Chrome, auto-type handle and beam, flush-type, cylin-
- 12. Jimmy-proof spring latches engage at each side as door is fully closed.
- 13. Rabbeted offset joint between each door section seals out wind, water, snow.
- 14. Tilted vortical track with graduated hangers provides tight close-fitting, yet easy-opening door,

Here is a sectional garage door made by Frantz, pioneer

GUARANTEED BUILDERS HARDWARD

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS ------

MAIL THIS COUPON FOR FULL FACTS ... Department 200-8 Starling, Illinois Bush me full information about the Over the Top " sectional type door Compuny Address

## More Sales-Appeal-More Eye-Appeal ...with These Folding Doors



Successful builders have been quick to recognize the added salesappeal Modernfold Accordion-type Doors give to their houses. They've found them a good means of turning prospects into buyers.

Modernfold Doors cost no more than ordinary swinging doors. For, in figuring the cost of a Modernfold Door, you save the price of trim, jamb, hardware, painting, etc. Modernfold Doors are priced as low as \$26.00 (F.O.B. New Castle).

And Modernfold Doors offer so much more. The colorful beauty of their fabric covering—the sturdy, trouble-free metal frame—the saving of so much valuable wall and floor space—and where you use large Modernfold Doors, flexibility of space.

So, plan for Modernfold Doors in the homes you build and sell. They're a real sales-maker. Be sure to have the full story by mailing the coupon today.

Look in your telephone directory under "doors" for the name of our installing distributor.

NEW CASTLE PRODUCTS
New Castle, Indiana
Is Cassia: Reymond Mig. Co., Ltd., Montroel

| Dir.    | ****             |
|---------|------------------|
| 2       | the en accordion |
|         | - A-0            |
| ANI     | nodernfold       |
|         |                  |
| A AHITM | by NEW CASTLE    |

| New Castle Products P. O. Box 830, New Castle, Ind. Gentlemen: Please send me full details on Modernfold D | by NEW CASTLE |
|--|---------------|
| Name   |               |
| Address  |               |
| City   |               |

Advertising . . .

(Continued from page 224)

the first to admit it. Even if he had the required talent and background, the space salesman just does not have enough time to sit down and carefully compose an advertisement that will hit the homesecker squarely between the eyes. This is a job for a professional molder of sales appeal—the copy writer with plenty on the ball, the fellow whose daily bread depends on his ability to weave words into a bell-ringing sales message.

So you have canvassed the field and finally chosen your agency. Then the question arises: "How much leeway am I going to give this outfit?" The ideal situation is where the builder, once his budget and advertising schedule have been settled, leaves all creative aspects to the agency-themes, copy, art, type faces and sizes, etc.-but checks each advertisement before publication for accuracy. The more a responsible, reputable agency is permitted to operate under its own creative steam, the more determined and effective is its effort to produce advertising that will pull, Conversely, the more the agency is hampered and restricted, the more does its selling effort labor under irksome handicaps.

#### Suggestions From Builders

This does not mean that the builder can offer no suggestions or ideas. Knowing that the builder lives day by day with his work and has a front-row seat on the market, the good advertising man realizes that the builder can contribute much. The danger arises when the builder, hurling his weight around as the man who foots the bill, seeks to ram half-baked ideas and amateurish notions down the advertising man's throat. In such circumstances it often takes a truly intrepid man to brave loss of the account by voicing an emphatic "No!" The builder may carry his point, but if, as so often happens, it results in ineffectual-even harmful-advertising, he has paid out hard cash for mere satisfaction of his ego.

A question of even more importance to the builder is: "How much shall I allocate for my advertising?" It would be ideal if we could set down here a clear, simple formula which would embrace every condition and contingency likely to arise in a sakes program anywhere in the United States. Unfortunately, we cannot do this—and

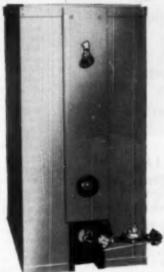
(Continued on page 228)



## Four-in-One BUDGET I designed to grow with the home

oil or gas







Here's a brand new heating idea . . . a winter air conditioner, for gas or oil, designed by J&C engineers, that requires the addition of only a component package to make it either an 85,000 . . . a 100,000 . . . a 112,000 . . . or a 120,000 Btu output furnace.

FOUR FURNACES IN ONE! It can actually grow with the home. Start with a four room home, and as the family and income increases . . . enlarge

the home without changing furnaces. Simply change a small, law-cost package and increase the output of the J&C "Four-In-One" to meet increased heating needs.

The "Four-In-One" is a quality unit . . . with 12 gauge heat exchanger, top quality cabinet and burner, and fully automatic controls.

An original design . . . engineered, warranted and built by Jackson & Church Company.



. AMERICA'S LARGEST AND MOST COMPLETE WARM AIR HEATING LINE . .



JACKSON & CHURCH CO. SAGINAW, MICHIGAN
"Work well done since "B1"



#### CASEMENT ROVIDE CUSTOM WINDOW EFFECTS from STOCK SIZE UNITS

Pella Casement Units can be combined into more than 300 different sizes of varying width and height. Installation cost is cut to a minimum because all Palla Casement Windows are completely assembled and pre-fitted at the factory. Pella Casements, in modular dimensions, fit right into specified rough openings.

#### CHECK THESE CONVENIENT, LOW-COST Pella FEATURES

BOLSCREENS -- Polls casemonts are equipped with inconspicuous, con venient Relectores that roll up and down like window shades. Rolscreens eliminate putting up, taking down,



painting, repairing and storage space.

DUAL GLAZING AND WEATHERSTRIP. PING - All Pulls Casements are dual glased to insulate against winter cold and summer heat , , , weather-stripped to eliminate drafts.

EASY TO OPERATE - Pella's patented hinge design and construction assure easy operation.

PITS ALL TYPES ARCHITECTURE -Pells Casements fit snugly into wood, frame, brick brick venuer, stone, etc. They esevey dignity and stateliness to Colonial architecture . . . anhance Cape Cod "cosi-. . . land breadth to Modern or Spanish styles and sturdiness to half-timbered English.

3-LIGHT WIDE UNIT -- Only Palla can build these wide casement units made possible because of Fella's patented hings design, superior sesh construction and steel

| For Farther Information,<br>and our catalog in<br>SWEST'S<br>ABCHITECTURAL<br>AND<br>BUILDING. | ROLSCREEN COMPANY, Dept. 8-6, Pells, lows Without obligation, send me PELLA CASEMENT DETAIL file a complete set of drawings showing size, applications and retrous combinations of Palla Casement units.  Name Firm |
|--|---|
| - 1  | Address.  |
| M - 2000   | PILLA CASEMENTS . BOLSCHEENS . VENETIAN BLINDS  |

#### Advertising . . .

(Continued from page 2%)

strongly doubt whether anybody else can

The picture is so complicated by variables that it is tremendously difficult to arrive at even a loose formula for a particular region, let alone the country as a whole, Influencing advertising costs are such fluid factors as the state of the market, the number and kind of media which must be used to tap the market, the rates of these media, the particular market sought, the competitive situation, the efficiency of the builder's sales organiration and the popular appeal of the home in respect to price, terms. location, design, construction and equipment. Obviously, a home which strikes popular fancy will cost less to merchandise than one not so favored, even though the latter's price may be less,

#### How Much To Spend

In the New York area many builder-developers are operating on a rule-of-thumb whereby they allocate for advertising a sum based on approximately one per cent of a unit's selling price. It is virtually certain that this basis will have to be revised upward as the market continues to swing in the buyer's favor and competition sharpens.

The best advice we can give about formulating an advertising budget is

1. In selecting an agency, choose one, if possible, with a solid background in real estate merchandising problems.

2. Discuss your entire cost setup with the agency's representative. If you are not candid and honest, you will hinder him in belping you arrive at the best estimate of what your advertising cost per sale should be

3. If you have chosen your agency wisely, its representative will be skilled and experienced in tackling merchandising problems, His counsel on your advertising hudget should be given the same neight as any other expert's advice.

4. Do not regard your advertising budget as inflexible. Conditions may spontaneously arise which may force you to readjust your sights.

#### Advertising When Market Palls

The above point raises a question which, as far as we know, has never been satisfactorily or absolutely answered. Should the builder attempt to buck a falling market? By "falling market" is meant a true

slump, not a normal seasonal luft. One school of thought maintains that when the sales corve plunges, the builder throws good money after had by continuing to advertise. Another school holds that the only way to stop a downward trend is to redouble the merchandising effort, which means even more advertising than before.

We are inclined to support the conservative school-with reservations. We believe that a true downward trend warrants a trimming of advertising sails by the builder. But there is a sharp difference between trimming and furling. Complete abandonment of advertising is likely to bring sales stagnation, since no effort is made to tap the hard core of sales potential that persists even in a sadly sagging market. Moreover, the builder who vanishes from public notice for an appreciable period loses promotional ground fast and finds himself that much behind when the upsurge starts, especially if his competitors have continued to advertise through the slump. It should be borne in mind that the public forgets-but fast!

When the sales curve dips-and it vannot be attributed to scasonal factors - the builder should not immediately start backing at his advertising program, Rather, he should wait long enough to determine whether the dip is merely temporary or is the unmistakable first stage of a long-term trend. If all available evidence convinces him that it is the latter, he may work out, with his advertising counsel, a restricted schedule. If a large user of display, he may reduce his space or even shift the bulk of his advertising to classified. In addition, he may become more selective in his choice of media, electing to bunt with a rifle rather than a shot-gun. He may do other things to cut down, but he must not permit the public to forget him.

#### When To Use Classified

The foregoing suggests another frequent query: "When shall I use classified and when display?" Like so much else concerned with advertising, it is virtually inspossible to lay down a definitive rule. Generally, where many units are concerned and the builder's advertising budget is in proportion, there is little or no question about the use of display.

It is when the budget is relatively small that the builder's advertising expert must weigh many factors, paying particular attention to the (Continued on page 230)



FIT ALL TYPES and MAKES OF WINDOWS

ROLSCREENS provide freedom from screen troubles! Once in place, always in place. Ne putting up—no taking down! No painting! No seasonal repairs! No storage space required. By minimizing window screen maintenance, ROLSCREENS pay for themselves over the years.

The exterior beauty of windows is preserved by ROLSCREENS because they are made of neutral colored AluminA wire cloth and installed on the inside. ROLSCREENS cost no more than good quality flat-frame screens.

Made by makers of FAMOUS PELLA VENETIAN BLINDS and CASEMENT UNITS When annual maintenance and labor costs are considered, ROLSCREENS actually cost less than ordinary screens.

10-YEAR GUARANTEE assures that clients will be satisfied with ROL-SCREEN performance.

Roiscroon Details in Handy File Pack

for installing on all types and most makes of windows. Ready for tracing right onto your plans.

MAIL COUPON

BOLSCHEEN COMPANY,

Without obligation ploase send PREE new blo of HOLSCREEN details and speci-

None \_\_\_\_

Firm Name

Address \_\_\_

---

### Make Sales Easier!



INSTALL Pyrofax GAS

In Homes beyond the Gas Mains



#### Gas Is Preferred!

Two out of three women prefer to cook with gas—and beyond the gas mains the choice is "PYBOFAX" gas. It is clean, quick and economical, not only for cooking but for water heating, refrigeration, and room heating as well. No matter where you build, you can offer home buyers all the advantages of the preferred fuel...gas.

#### Turn "Shoppers" Into Buyers

Give them the fuel they want-install PYROFAX bottled gas service. Installation is quick and easy-low in cost-no expensive tanks to buy-no special wiring -- no changes in construction needed. Supply is guaranteed in writing.



#### Nationally Advertised Appliances

Magic Chef and Caloric ranges, Servel refrigerators, Ruud and Eryant water heaters, and other gas appliances are available for use with PYROFAX Gas—from our distributors in 30 states east of the Rockies.



For full information see SWEET'S CATALOG, or address Dept. AR.

#### PYROFAX GAS DIVISION

Union Carbide and Carbon Corporation 30 East 42nd St. Tee New York 17, N. Y.

"Pyredax" is a registered trade-mark of Union Carbide and Carbon Corporation.

#### Advertising . . .

(Continued from page 229)

estimated time that it will take before his client sells out. Faced with a restricted budget and fairly long duration before sellout, the expert's emphasis will be on the repetitive and cumulative values of the less expensive classified. If he can, he may launch the campaign with display to gain initial impact and then shift to fairly frequent classified insertions, especially if the classified columns of the media in the target area command public respect. Often an effective program consists of a judicious combination of display and classified.

Far less dramatic than display, classified in newspapers with real pulling power, nevertheless, can be strong sales medicine. In the Spring of 1949, Town Advertising Associates conducted an all-classified campaign for a North Jersey development of 60 homes priced between \$11,500 and \$12,000. Three New York and two Jersey dailies were used. The development was sold out in three months at an average advertising cost of \$35 per sale.

#### What Makes Good Display

When wrought by inept hands, marked by lack of imagination and originality, a display advertisement often merely grunts instead of singing out. The elements that make a good display ad are:

 Generous use of white space to command notice by contrast, to heighten readability and to lend dignity and class.

 An impressive-sized illustration of the home done by an artist skilled in enhancing the appearance of the dwelling and its setting.

3. A provocative headline carefully calculated to stir the reader's interest sufficiently to make him go through the rest of the ad.

4. Sprightly, original copy which shuns blatant exaggerations and such overworked, threadbare words and phrases as "quality." "superb," "matchless," "top value," "must be seen to be believed," "once in a lifetime," "bargain" and a host of other rheumy, broken-down verbal nags that have been trudging through real estate ads ever since the first primitive man offered his cave for sale.

An attractive, distinctive format which, through repeated use, becomes one of the advertising identifications of the builder.

Generous-sized type which can be easily read, with readability further enhanced by spaced-out lines

(Continued on page 232)



## The Original\Structural Insulating Board

Asphalt Treated Throughout . . . . Every Fiber Protected

36 YEARS EXPERIENCE. Not only is INSULITE the original structural insulating board, but it is also the original waterproofed structural insulating board.

As far back as 1915 (long before similar products were ever produced), INSULITE was being specified for double duty service in important building projects. (See old historic photo above and note that even at that early date, the unretouched banner in the photo emphasizes the moisture-resisting qualities of INSULITE.)

INSULITE Graylite products are asphalt treated throughout — not merely a surface coating. Every fibre in the board — inside and outside — is thoroughly - safely - adequately protected. That's why INSULITE resists moisture so amazingly well. If a storm wets INSULITE Sheathing (Bildriete or Graylite) before the job is finished — don't worry. No permanent harm is done.

Waterproofed Bildrite Sheathing and Sealed Graylite Lok-Joint Lath also combine to control another serious moisture problem . . . vapor condensation in walls. The double asphalt coating of the sealed Lath on the warm side of the wall retards vapor travel, while the vapor breathing characteristics of Bildrite on the cold side permits escape towards the outside. Send for new leaflet describing approved construction methods that control frost and moisture damage in walls.



See Sweet's tile for builders -- 2xf11

#### CONDENSATION IN WALLS

INSULITE DIVISION, MINNESOTA AND ONTARIO FAREE COMPANY Dept. A6-250, Baker Arcade Bidg. Minnesopolis 2, Minn.

Send me that easy to understand leafler showing how the approved INSULITE WALL OF PROTECTION controls maisture condensation in wells.

Address

City Lines 2.50



Mere is the most versatile lock for every sliding door application. It is adaptable to any requirement as to hand, security and finish... while the three standard sizes adjust to fit any door thickness, 114" to 2."

The thumb button, emergency or blank discs or cylinder can be interchanged from side to side on the job. This means that dealers can supply any combination required by merely stocking a few representative discs and cylinders in popular finishes.

Rite-Lock is easily installed by a simple cut-out without any martising. The escutcheon measures  $415^{\prime\prime} \times 275^{\prime\prime}$  All exterior parts solid brass. Write us on your letterhead for the new Adams-Rite Cotolog 49.

#### CYLINDER BEADLOCK FOR SLIDING BOORS

This cylinder deadlock eperates by cylinder from one or both sides. Fits oll standard cylinders with adapter came furnished (specify when using Yole or Sargent cylinder). Solid brease face, strike and boll. Meat tracted aluminum effor case. Use your own cylinders and trim. Also used as jimmy pated lock.



ninz mit miniciture ci

#### Advertising . . .

(Continued from page 230)

and what the advertising man calls "lots of air" between paragraphs.
7. A smartly designed signature,

which lingers in the reader's memory.

8. When necessary, clear specific directions about reaching the particular home or development being advertised. If you think many prospects may get lost, use a map.

#### Illustration Is Vital

The illustration of the home is so vital to good display advertising that the subject requires claboration. The builder need only reflect on the success of various heavily illustrated snagazines to realize how picture-minded the public is. A skillfully executed illustration, prominently displayed, delivers a wallop that seldom can be approached by copy. The illustration should be the finest obtainable. The cost may come high, but the impact on the reader pays handsome dividends.

We much prefer drawings to photographs because the coarse screen employed in the making of newspaper half-tones almost invariably weakens the quality of a photograph. In addition, many homes of fine exterior design photograph poorly, particularly those with natural-grain finish, and they can only be done justice by an artist trained to bring out architectural subtleties that the camera often misses.

Many display advertisements about homes, in our opinion, lose impact because they are cluttered not only by too much copy, much of it in microbe-sized type, but also by a multiplicity of themes. It has been said that the reading of a newspaper should not be made a physical or intellectual exercise. The same holds true of advertising. Stated another way, if the appearance of your advertisement makes people think that they will have to work to read it, it will be largely unread.

#### Stick To Simplicity

Format can be simple yet attractice. And copy built around one central theme is much more digestible and likely to pull than a jumble of themes. In the opening phases of a display campaign, it is often necessary to use much copy to acquaint the public with all of the home's features. After this has been done, however, it is advisable to change copy, devising a single (Costinued on page 236)



THE "tops" in nail hammers. Made especially for those who take pride in owning the best tools. Fine alloy steel head is drop-forged, scientifically heat-treated and polished. Comfortable, selected hickory handle has distinctive octagon-shaped neck. "Evertite" handle processed for permanent tightness. Exceptional design gives extra striking power. Perfect balance makes work easier, faster.

The best hammer you can buy, the best you can use . . . heft the Stanley 100 Plus and "feel" the difference. See the complete display of Stanley Tools at your nearest hardware dealer's. Stanley Tools, New Britain, Conn.

THE TOOL BOX OF THE WORLD



Flore 13 W Prof 1369

HARDWARE - HAND TOOLS ELECTRIC TOOLS - STEEL STRAPPING

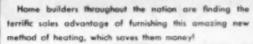
## 1,000,000 NEW HOMES FOR 1950 ... NEED BETTER HEATING EQUIPMENT!

Accounting New Low Cost War Revolutionary New Low Cost War Revolution

of Providing Warm Floors by Radiant Heat
plus Circulated Warm Air
with the New Anlernational
Oil and Gas Furnaces

#### Originators of radial and radiant perimeter heating,

International engineers have now developed new low cost furnaces for oil as well as gas to provide what the building industry has been seeking! Heat that is delivered into the floors provides warm floors, with a blanket of heat at outside walls. Closest floor to ceiling uniformity. Minimum ducting and installation expense. Low cost operation. Exclusive patented spring-suspension provides absolute quietness of operation. Compactly engineered, requires less than four square feet of floor space. Heats up to fl rooms.



Smith-Hill, Chicago; Place & Co., South Bend; General Industries, Fort Wayne; Cottage Hames of Norfalk; Midwest

Housing, Janesville, Wisconsin and New Century Homes, Clinton, Indiana are just a few of the nationally known builders who have adopted this International equipment for their houses.

Whether you are planning one — or a thousand or more homes — these new furnaces are designed to solve your heating problem.

Fill out and mail coupon for complete brochure on how the above and other national builders are helping to sell their homes this new way!



South John Michaels, Purk Bidge, D. Price winning community. Pleasant heating uniformity and law cost eperution, britis



PLACE & CO., South Bend, Ind. August "Architectural Farum" feature. "Low cost beating institutions with even distribution of beat international M.7 halos will beauty."



CénéBAL BIOLISTES, fo Wayne, led. february 'Living' magazine feets od artists. Securitional touring with floor to-college.

#### SEE THE NEW International FURNACES AT THE NAME SHOW . HOTEL STEVENS, CHICAGOI

International OIL BURNER CO.



#### Get on the





It's more profitable to feature the brands the public knows best!

And Celotex, famous for over a quarter century as a pioneer and pacemaker in the building products field, is recognized everywhere as the Greatest Name in Insulation.



It's more profitable to feature the brands that are first in consumer preference!

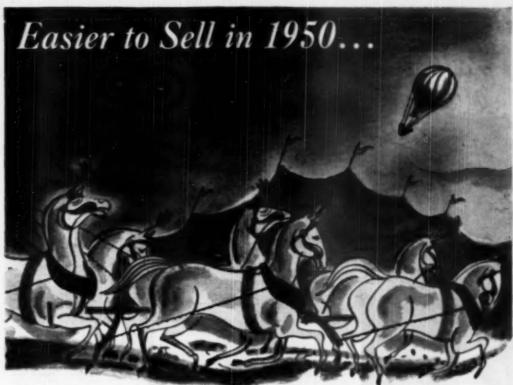
And year after year, impartial surveys have shown that as many as 7 out of 10 people who ask for insulation products by brand name, ask for Celotex.



It's more profitable to feature the brand that's most effectively advertised!

And last year's Celotex advertising to stimulate the building of more homes, for example, scored one of the most spectacular successes in the industry... with the public and trade alike. What's more, the Celotex national advertising campaign for 1950 promises to be even more posserful, even more productive! Yes, for over 25 years you have always been able to count on Celotex for resultful advertising and sales promotion support!





## "Brand-wagon"

Any way you look at it—it's more profitable to feature Celotex Products!

So climb aboard the Celotex "Brandwagon." Use famous Celotex Building Products in your 1950 homes. Feature, display, and promote the famous Celotex line. The in with the tremendous new advertising push Celotex is launching to stimulate home construction this year. Write now for your free copy of an informative new book on Celotex Building Materials. The Celotex Cosporation, 120 South LaSalle Street, Chicago 3, Illinois.

Insist on Genuine

CELOTEX

BUILDING PRODUCTS

THE CELOTEX COSPORATION - CHICAGO 3, ILLINOIS



### AT LOW FIRST COST and LOW INSTALLATION COST

this oil floor furnace provides small homes with a fully automatic, electrically controlled oil hearing plant of high efficiency and BIG heat producing capacity.

#### NATIONALLY ADVERTISED FEATURES SELL HOMES:

- · Exclusive self lighting feature.
- · Supreme conduct-
- Less bousework, because of clean fuel and no some
- · Burns low com caralytic oil.
- No becoment needed.
- · No moving parts in buener to wear out.
- · Listed by Underwriters
- · Factory guaranteed.



Dept. A-2, San Rafael, Calif.

#### Advertising . . .

(Continued from page 232)

theme for each new advertisement. Many of the copy techniques used in display can also be applied to classified, but the emphasia in the latter should be on presenting, as concisely and compactly as possible, an array of solid facts. Because it cannot be illustrated, the classified advertisement must seek through specific description to give the reader a clear, persuasive impression of the home's unique advantages and its outstanding features.

Indiscriminate use of time-worn, hackneyed words and phrases makes the reader suspect the advertisement's credibility. It also weakens the required factual description. A good classified advertisement actually amounts to an inventory of what is in the house, plus data about plot, price, terms and location.

For instance, rather than using a phrase like "charming living room," it is preferable to list the salient features of the room in a way that will make the reader himself conclude it must be a charming place. In the same way, rather than saying that the home is "convenient to everything," it is wiser to state—assuming it is so—that it is "I block from 3 bus lines, 2 blocks from public school and shopping center." Being specific about your attractions pays off.

Like its big display brother, the classified advertisement should open with an arresting headline in larger type, if for no other reason than to attract the reader's eye as it races up and down the tightly packed columns. Smart use of white space in margins and between logical divisions of the copy and sub-heads in larger type will not only serve to attract attention' but will greatly enhance readability. Obviously, competition for attention in classified columns is much more intense than in the display sections.

#### Nelson Corp. Names New Advertising Manager

Robert F. DeLay has been named manager of advertising and sales promotion for the Herman Nelson Corp., Moline, Ill., the firm's president, Richard H. Nelson, announced recently.

DeLay's duties will involve the coordination of advertising and promotional activities of all Nelson divisions, including merchandised products, engineered products, portable products and unit ventilators.





## 3 ways

# Walker-Turner Designing can help you to cut building costs

Builders are more aware today, in a buyer's market, of Walker-Turner designing. For design is at the bottom of the high operating efficiency of Walker-Turner woodworking machines. And the more efficiently you can build, the lower your building costs.

Actually, this emphasis on design is nothing new with Walker-Turner. New machines (such as those shown) are constantly being added to the line. But the safety, accuracy, ease of handling and economy of Walker-Turner machines are due to the fact that they've always been built with the building industry's needs in mind.

For full information about these and other cost-cutting machines in this complete line, see your local Walker-Turner dealer, or mail coupon for catalog.

SOLD ONLY THROUGH AUTHORIZED DEALERS

|                         | reor Bir., Koarney & Trecker Corp.<br>Floisfield, N. J. |
|-------------------------|---|
| Please sand<br>Catalog. | I me a copy of the Walker-Turner                        |
| Name                    | 0311314   |
| Fem                     |   |
| Ch                      | Danie State   |

## This siding has permanent, flawless beauty!

The beauty and quality of Kaiser Aluminum Siding can never be marred by knots, splits or sawing scars! It's precision produced, low in cost. Its flawless beauty will last generations!

Permanent, baked-on paint finish can't chip, crack or peel.



STRONG, DENT-RESISTANT. Can't rot, warp, creck or rust. Made of highest grade aluminum. Fire-resistant. Can't be damaged by termites.



curve surfact, installed under tension, makes rigid, sound-resistant, insulating siding with weatherproof joints, beautiful shadow lines without wrinkles. Easy to apply. Low construction costs!

Meets FHA requirements for new construction. Write for free AIA file. Kaiser Aluminum Siding is produced by Kaiser Aluminum & Chemical Corporation.

### Kaiser Aluminum

Sold by Kaiser Aluminum & Chemical Sales, Inc. Kaiser Building, Bakland 12, California

#### How to Nail Asphalt Shingles

Any roofing material must be properly nailed to a sound deck if it is to give good service. The deck must hold the nails, and the nails must hold the roofing. To insure a roof that will give long, trouble-free service, enough nails of the right kind should be used and properly located.

It has been well-established that premature roof failures are almost invariably due to faulty application, not to the roofing material itself. For example, 3-tab, square-butt, strip shingles too frequently are applied with only four nails instead of six, as recommended by the engineering committee of the Asphalt Roofing Industry Bureau, and the nails are located too high in the shingle. As a result, the shingles are not anchored fruily to the deck.

It is not difficult to apply asphalt shingles correctly. In fact, contractors generally agree that asphalt roofing is easier to apply than other roofing materials. A few simple, easily-remembered instructions will assure proper nailing.

#### Size and Kinds of Nails

Use only galvanized roofing nails of 11 to 12 gauge, and with heads 35 inches in diameter or larger.

Length of nails depends on type of work: Use 1½ inch nails over new wood decks. Use 1½ inch nails over old asphalt roofing. Use 1¾ inch nails over old wood shingles.

Nails should penetrate at least 34 inches into roof deck.

Drive nails straight to avoid cutting the fabric of the shingle with the edge of the nail head.

Do not sink the nail head into the surface of the shingle.



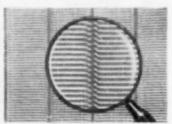
IN APPLYING asphalt shingles over an old wood shingle roof, first natil down all loose shingles. Split warped shingles and nail down the sequents. Place hevelled wood "leathering strips" along the buts of each course of old shingles. Then apply an eaves flushing strip of asphalt roll roofing along the coves. Use six natis in each three-tab. square butt. asphalt strip shingle.

(Continued on page 240)

#### New screening device keeps hottest rooms cooler!

Thin louvers set close together at an angle against the sun make Kaiser Aluminum Shade Screening the lowest cost screening and cooling device you can put on a window!

It deflects sun's hot rays without blocking the view. Thus, hottest rooms are as much as 15° cooler, yet light and airy.



PRECISION PRODUCED from tough, high grade aluminum. Can't rust or stain. Never needs paint. Adds extra beauty to any window, extra value to any home.



PROTECTS INTERIORS against sun fading. Low in cost. Easily installed. Keeps out insects. Available from sash and screen manufacturers and building material jobbers.

Write for free AIA file. Kaiser Aluminum Shade Screening is produced by Kaiser Aluminum & Chemical Corporation.

## Kaiser Aluminum SHADE SCREENING

Sold by Kniser Aluerinum & Chemical Sales, Inc. Kniser Building, Bakland 12, California \$19500

Including motor

f.e.b. Norwalk, Ohio
fashinat to change
without notice)

Easy time payments!

DELTA

low-cost, portable job shop

Exclusive Double Radial Action

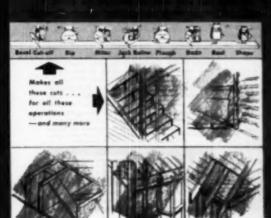


Helps you sell more houses!

Makes money for you these ways:

Helps you get more remodeling jobs!





Power Tool Division SOCKWELL MANUFACTURING CO. 5300 E. Vienna Ave., Milweykes I, Wile.

lead me new Delta Multiples catalog,
"Unlimited Applications."

Name.

Title .

Compan

City

[\_\_\_] State



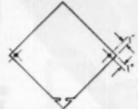
Your Name

How To Nail . . .

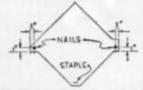
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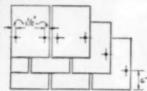
STAR. SQUAREBUTT, STRIP SHINGLES. -Use 6 sails in each strip. Locate the notile on a hartening line 5% inches from the exposed butt edge; locate one nell one inch in from each end of the skingle: focate the remaining 4 notifs 11% inches on each side of the center line of each cutout: align the shingle before driving notice to avoid buckling; start nailing at the and necrest the shingle last applied and precord to the apposite end



INDIVIDUAL NEXAGONAL SHINGLES (is. teriocking Type).—Use 2 nails in each shingle: locate one nail in each corner one inch in from the diagonal edges; (5cure the lower corner of each shingle by inserting the locking device under the exposed edges of the adjacent shingles in the next course below



INDIVIDUAL HEXAGONAL SHINGLES (Secured with fosteners): Use two notis and one fostener in each shingle: locate the nails one inch up from the lower edge of each shoulder tab, and one inch in from the end; apply the featener to the lower corner of each shingle so that it secures the adjacent tales of the shingles in the course next below, but not to the shingle in the second course below, which lies on the deck. The tab should never be native down



GIANT INDIVIDUAL SHINGLES American Methods-Use two soils with each shipgle. Locate the natls 6 inches up from the lower exposed edge of the shingle, and 13's inch in from the side edge

(Continued on page 242)



#### w Single Unit ILATORS

ECONOMY MODEL with stainless steel louvers

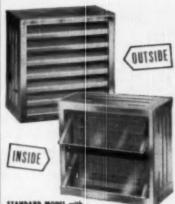
permanent on the outside and adjustable on

the inside---!/ navings in cost. Available in 6-inch and 8-inch sizes.



has permanent stainless steel louvers on the outside and ad-justable glass Available in 6, 8

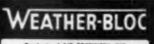
louvers on the inside. and 12-inch sizes.



GLASS LOUVERS INSIDE AND OUTSIDE Blends in perfectly with gloss black ponets. 6, 8 and 12-tech stem

WEATHER-BLOC takes no longer to install than a single glass black—simply set in place of a glass block. Used in HOMES, STORES, OFFICES and INDUSTRY, WEATHER-BLOC offers controlled ventilation . . . alum inum screen inside tetards rain, snow, dirt and insects . . . no sacrifice to beauty or ermanent stainless steel budy Economy and Utility models are well adapted for basements and other low level tocations where gloss louvers might be subject to breakage. Can be installed in completed construction as well as new construction.

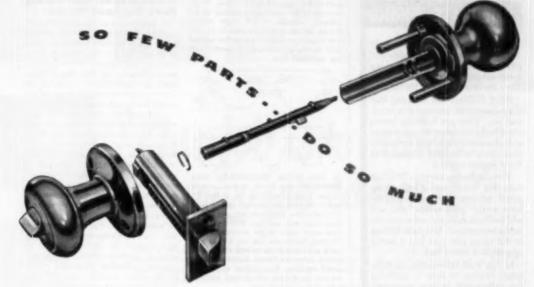
rough Your State Black Dauler or Job By Distributed by Winca Vantilater Co., Britise Street, St. Louis, Missauri



SIMPLICITY makes Kwikset Locksets

one of America's outstanding tubular locks!





RWIKSET COMBINES STRIKING BEAUTY, NICH QUALITY AND EASE OF INSTALLATION WITH LOW COST!





Millions of dollars worth of appliance advertising has thoroughly sold prospective home purchasers on the many advantages of electrical living. They are convinced it is for them.

Alert builders are learning that they can put this conviction to excellent use. They are building homes electrically adequate to any reasonable demand of today and tomorrow. And—they're telling prospective home buyers about it.

You must wire, anyway. Why not turn this "must" into a real selling point? Adequate Wiring is one of the least costly "plus values" you can add to clinch sales and out-smart less acute competitors. Adequate Wiring in the plans also gets you a better appraisal—a better loan.

If you want information on Adequate Wiring, or help in applying this selling tool to your operation, the National Adequate Wiring Bureau will be glad to put you in touch with the local Bureau nearest you.

Just use the handy coupon.



Selling's Less Tiring With Adequate Wiring

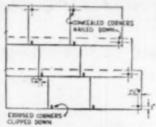
| National   | Adequate | Wiring | Bureau |
|------------|----------|--------|--------|
| Department |          | -      |        |

155 East 44th Street, New York 17, N. Y. Please put me in touch with the nearest local Adequate Wiring Buresu. I'm interested in giving my homes more sales appeal.

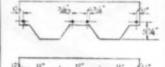
| CITY    |   | STATE |  |
|---------|---|-------|--|
| ADDRESS |   |       |  |
| COMPANY |   |       |  |
| NAME    | - |       |  |

#### How To Mail . . .

(Continued from page 240)



GIANT INDIVIDUAL SHINGLES (Dutch Lop Methodi: Use two notis and one fustener in each shingle. When laying the shingles from left to right, locate the neils in the upper left and lower right hand corners one inch in from the side and one inch is from the top or bottom edge. When Inying shingles from right to left, reverse the position of the noils. Use fusteness to secure the exposed lower corner of the shingle to the overlapped portion of the adjacent shingle in the name course. Never neil the excessed corner down. Use either non-corrudible wire stupies applied with a stapling machine, or special copper featening clips



2. AND STAB HEXAGONAL STRIP SHINGLES.—Use 4 noils in each shingle. Lecate them horizontally on a line 5½ inches up from the exposed butt edge. In 2-tab shingles, blace one not! one inch in from each end, and one not! 5½ inch in from each end, on do no no! 5½ inch in from each end, on do no no! 5½ inch in from each end, ond center a noil above each cutout. Align the shingle before notling to avoid buckling. Start noiling at the end necrest the shingle hast applied, and pre-

#### Insulation Board Institute Re-elects Fairfield

ceed to the opposite end

M. C. Fairfield, general sales manager of the Insulite Division of the Minnesota and Ontario Paper, was re-elected president of the Insulation Board Institute at the trade group's recent annual meeting in Chicago.

D. D. Crandell, National Gypsum Co., was elected vice president. The following directors were named: E. C. Faulkner, United States Gypsum Co.; J. Z. Hollmann, Flintkote Co.; W. R. Wilkinson, Johns-Manville Corp.; D. M. Pattie, Wood Conversion Co.; and Marvin Greenwood, Celotex Corp.

#### Promotion Placard Offered To Retail Lumber Dealers

An attractive promotion placard to help lumber dealers sell Maple, Beech and Birch flooring is offered by the Northern Hardwood Flooring Manufacturers Association.

This promotion follows the recent distribution of two dealer-aid leaflets to lumber and material dealers throughout the country. A more claborate promotion campaign will get under way in 1950, according to W. C. Abendroth, president of the Maple Flooring Manufacturers Association.

Base of the display placard is three 10-inch strips of 25/32-inch Northern Hard Maple. The placard is 8½x13½ inches, printed in three colors.

#### Gas Burner Automatically Switches to Oil Heat During Peak Gas-Load Periods

A new type of gas burner that automatically switches to oil fuel at times when gas is in short supply has been developed by the Gas Service Company and the Midwest Research Institute of Kansas City, Mo. The development is particularly significant in view of a possible coal shortage which would place peak demands on gas.

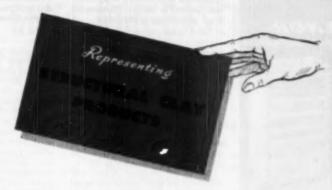
A recurrent problem faced by gas utilities is that high demands for gas house-heating often occur for brief periods of time; for example, during severe cold waves which tax the storage and production capacities of even the largest systems. The standby gas load maintained by gas, suppliers is in many cases quite expensive, the cost to the company being several times that of an equivalent amount of base-load gas. For this reason the Gas Service Company believes that maintenance by the consumer of stand-by facilities offers a double advantage-affording peak-load relief to the utility company and assuring the consumer that automatic heat will always be available

The equipment developed in Kansas City consists of a single unit designed to burn both types of fuel, with operation being entirely automatic. An outside thermostat automatically switches from gas fuel to oil fuel when the weather is severely cold, and back to gas when the temperature rises. In most areas the thermostat is set to change from gas to oil at 20 degrees F. Since there is a slight lag in the outdoor control, the switch back to gas is effected when the outdoor temperature reaches 25 degrees F.

On an annual basis the average home will use about 15 to 20 per cent oil and 80 to 85 per cent gas.



Corbin E. Gorton 120½ Welch Avenue AMES, IDWA



341 State Street, Suite 410 NEW HAVEN 10, COINL



Allon S. Platt 1949 Grand Central Terning NEW YORK 17, N. Y.



Jack Neighbor 208 Kittredge Building DENVER 2, COL.



Arthur Stone 228 North LuSolle Street CHICAGO 1, ILL.



Kenneth B. Harris 606 Renkert Building CANTON 2, OHIO



S. M. McNoll 502 Banadon Trees Building PITTSBURGH 22, PA.



James R. History 1518 Wolnut Street PHILADELPHIA, PA.



John M. Anderson Central Building SEATTLE 4, WASH.



George E. Soinar, Jr. 55 New Montgomery Street SAN FRANCISCO 5, CALIF.



W. G. Demorard Clay Products Ass'n of the S.W. Lindefield Building, AUSTIN, TEXAS, First National Building OXIAHOMA CITY, OKIA.

# Owr job is to make " your job easier!"

Take a good look at the picture of the SCPI regional director in your area. Note his same and address and make a point of getting acquainted with him soon. He's a good man to know. Here's why . . .

Your regional director of SCPI was chosen because he's an expert at helping you. His calling card, in effect, means "at your service."

He knows brick and tile. He knows engineering. He knows the building business. He wants to know you.

You can count on him for sound advice on the best types of brick and tile to use on a given job, or for the latest information on how best to use them and how and where to get them. He can even tell you how to set up a program for training more men to use structural clay products.

In short, be knows, or can find, the answers to a good many of your problems,

By an aerving you, these regional directors are carrying out SCPTs programs for the building industry at the local level—bringing the benefits of our apprentice training, research, information and engineered housing services directly to you!

All you need do is tell your SCPI regional director your name, your address and your problem, and be'll welcome the chance to help you. Why not call on him, soon?

MAIN OFFICE

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Then industrialists, mer-cents, dealers and contractors will buy more Rest unit heaters next week than any other make is not new. It has happened for years. There's a reason for Resnor leadership. Write today.

. FULLY AUTOMATIC

other make

- . EXTRA LARGE FAN
- . SPECIAL HEAT EXCHANGER
- . STRONGER CONSTRUCTION
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- . LOW COST INSTALLATION
- . ALUMINIZED STEEL INTERIOR UNIT

Gas Unit Heaters Since 1888

REZNOR MANUFACTURING CO.

17 UNION ST. . MERCER, PENNA.

#### Charles Simonson Appoint-ed Eastern Sales Manager For American Builder

The appointment of Charles Simonson as Eastern advertising sales manager of the American Builder has been announced by the directors of the Simmons Boardman Publishing Corp. He succeeds J. Sidney Crane, vice president, who has been appointed general sales manager of Simmons Boardman's transportation publica-Pioms.

Simonson has served for the past three years as assistant Eastern sales manager, with headquarters at the New York office, 30 Church St.

In his new position, Crane will remain in charge of promotion for all publications and will continue to maintain headquarters in New York.

#### Crittell-Federal Changes Mame to Crittall Inc.

Crittall-Federal, Inc., Waukesha, Wis., manufacturers of windows and doors, has announced the change of the corporate name of the company to Crittall Inc. The organization's board of directors pointed out that the change was made to achieve brevity for the title and that no change in organization, policy or personnel was involved.

#### **Prominent Builders Serve** As Instructors in C.C.N.Y. Light Construction Course

The Midtown Center of The City College of New York has announced the appointment of three prominent New Jersey builders as instructors in three of the technical subjects in the course. The Light Construction Industry - Merchandising, Materials, and Methods.

John S. Wright, executive vicepresident of the New Jersey Home Builders Association and a former small home construction manager for a large construction organization, has been appointed to lecture on Job Management, R. D. Hudson, president of the Skytop Engineering Co., Montclair, N. J., who has specialized in building substantial developments will cover Construction Methods. Fred Naci of Naci Builders, Inc., of Summit, N. J., will give the instruction in Materials and Labor Estimating.

The Light Construction Industry Course-sponsored by the National Retail Lumber Dealers Association and the New Jersey Association-is designed as a basic training course for beginners in light construction or building material distribution. Lectures by representatives of building materials manufacturers are featured.



#### USE THE

#### BURSON CLIP SYSTEM

#### . BUILD YOUR REPUTATION

You add to your reputation for quality work when you use BURSON CLIPS. The construction of floating walks and sailings

#### CUSTOMER SATISFACTION

No more disgrantled have sore costly patching work.

#### IT'S ECONOMICAL AND EASY TO INSTALL

dard fathing nails are used with BURSON CLIPS, with 80% less noiling necessary. This speeds iresolfation and cuts your lobor costs.

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#### WRITE TODAY

DEALER INQUIRIES INVITED

#### ly used in Industrial Projects throughout the country. Send for complete inform WRITE TODAY

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2443 S. INDIANA AVE.

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THE BURSON CLIP

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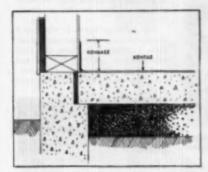
**Suspended Cellings** 

The BURSON "C" CLIP for

gypsum lathing on suspended

calling construction eliminates tedious hand trying to furring channels and enhances the fire safety of the construction. Wide-

## KENTILE GIVES NON-BASEMENT HOMES HANDSOME, LONG-LASTING FLOORS



Installs on concrete in direct contact with the earth—All fillers, binders and pigments in Kentile have high resistance to the alkali found in concrete. And Kentile's asbestos filler assures insulation against the cold and moisture in concrete floors. Equally ideal for installation on radiant-heated concrete slabs.

Also: Kentile can be laid over double T&G wood floors—or directly over firm plywood. Saves installation and labur costs because it can be laid tile by tile—eliminating the handling problems in laying flooring from heavy, hard-to-move rolls. Ready for use as soon as it is laid.

A CHILD'S BEDROOM like this gets hard usage—but that won't faze Kentile. Colors go clear through the tough, scuff-resisting material—can't wear off. Kentile stoutly resiste dirt and stains—a few flicks of the mop and it's shining like new. The many desirable features of these attractive resilient floors are being brought to your clients' attention in leading magazines.



EVERY ROOM in the 6,000 Levitt Homes is floored with Kentile. Because it permits installation right over concrete on grade, Kentile helps cut construction costs in homes like this.





KENTILE floors give you freedom for design at low cost,





IN ADDITION TO 23 COLORS and a wide variety of feature strips, you can select "Kenmerta" and "Themetile"—individual decorative touches for adding custom-made distinctiveness at low cost.

KENTILE.

The Permanently Beautifu Asphalt Tile DAVID E. KENNEDY, INC., 58 Second Avenue, Breeklye 15, M. Y. 350 Fifth Are., New York 1, N. Y. \* 705 Architects Bidg., 17th and Sensom St., Philadelphia, Pa. \* 1211 N.S.C., Bidg., Cleveland 14, Chlo \* 1225 Moores, S. K. E. Arlante 2, Oo. \* Kansas City Merchandise Mort Inc., 2201-6 Grand Are., Kansas City B. Mo. \* 1440 11th St., Donver 4, Colo. \* 4522 South Kolle Are., Chicage 32, Ill. \* 1113 Vine St., Houston 1, Texas \* 4501 Santa Fe Ares, Los Angelos BB, Calif. \* 95 Market St., Oekland, Calif. \* 462 Statler Bidg., Boston 16, Mass.



Off the best method of ventilating kitchess, bestroess, foundries, dans or other small rooms specify and install the Trade Wind Clipper, This provon ventilater is the enty small room unit that gives the home owner overy venthabile advantage.

Societal case blowers, accepted and used in air conditioning systems and for forced nit heating, are used enclusively in the Trade-Wind Clipper. This forced air discharge, located at the cailing, trops all awanted air and expels it instantly. Trade-Wind also has located the motor completely autoide the greasy oir stream. The motor story clean indefinitely-requires for less service - and is guaranteed for 5 years, No. other small room ventilator combines all these outstanding advantages. In addition, Trade-Wind Clippers are easy to installthey are competitively priced"-and they make every new awast another salesmen for the Trude Wind line.

Get the complete story from your local topply source, or moil the coupon teday,

\*Important price reduction has just been made on Model 2001.

MAIL THE COUPON TODAY

| TRAD   | E-WIND   | MOTO     | STARS.    | INC.    |        |
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| SPOR!  | Main 9   | Los Ar   | igeles 37 | Calif   |        |
| Flex   | ne send  | me the   | complet   | a story | on the |
| Scools | Wind Co  | oling Ye | an lefet  |         |        |
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#### Armstrong Cork Co. Adds New Auditorium to Main Offices

One of the most modern auditoriums constructed by an industrial organization for its own use has been completed by the Armstrong Cork Company at its general offices in Lancaster, Pa.



INNER lobby display room of Armstroog Cock Company's new 900-seat auditorium

The new 900-seat structure has a professionally-equipped stage, public address and lighting system, facilities for broadcasting, and an electric organ. It is constructed as a unit with foyer, cloak rooms, and a large area for permanent displays of company products.

The auditorium is designed primarily for such company activities as conventions, exhibits, and basiness gatherings. In addition, the facilities will be made available for me by Armstrong employee organizations. The company's weekly half-hour radio program, "Armstrong Time," is broadcast from the stage with employees and their families in attendance.

The building serves in itself as a display of many of Armstrong's products—Corkboard insulates the roof and sidewalls and the hot air and ventilating ducts; magnesia pipe covering distributed by the firm is used



NEWLY completed 900 seat auditorium is shown above as it appears from stage

on the heating pipes; cork machinery isolation reduces the noise of equipment; Linotile is used on all floor areas; and acoustical materials used include Arrestone, Travertone, and Cushiontone.



Now a
3 ca. ft.
PLASTER
and
MORTAR
MIXER...



#### for the small contractor, or for decentralized mixing on large jobs

With B. & S. engine drive \$320 . . . Electric motor drive \$300

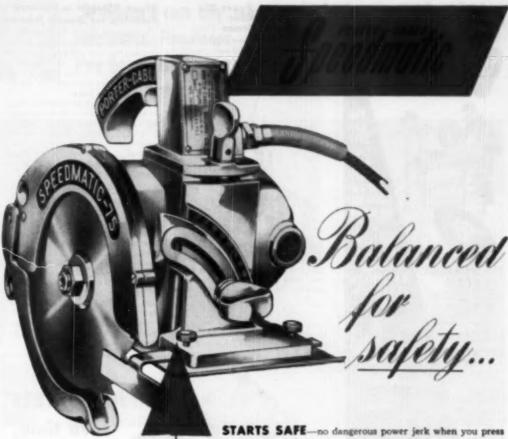
More's a unit that will place your mixing on an officient money-arving basis. Just whoel it to the spot nearest the work . . . goes through 20-inch doors. Charging height 32 Incher . . . heavy-duty blades give end-to-end action for thereugh mixing . . . bug splitter news time. Ringed housing for quick access to engine and drive . . . hinged safety grating for oasy cleaning. Long-like canstruction . . . . heavy roller chain and machine-cut gear drive . . . trouble-proof stuffing between

Literature on request

Also 6 and 10 cs. ft. plaster and morter mixers, tilting and ese-tilting coacrete mixers, concrete carts, morter bases

MULLER MACHINERY CO., Inc.

Metuchen 4, New Jersey



Balanced Two Hays ...



#### 1. WHEN YOU LIFT IT

You can actually suspend a Speedmatic from one finger -- it won't tip, veer or twist, Thor's perfect Static Balance, first recease for bother cowing,



#### 2. WHEN YOU USE IT

Press the trigger — get that Speedmatic "feel" in action. Note how easily it hondles — how smoothly it cuts — how it "obeys" your guidants. No power jerk, Perfect Dynamic Balance.

The Balanced Sine

STARTS SAFE—no dangerous power jerk when you press the trigger—helical goar drive makes blade enter the cut straight and true; prevents cramping.

SAWS SAFE—big, broad base of your Speedmatic is a real safety factor—keeps saw steady, easy to manage, readily sighted on the guide line from any sawing position.

STOPS SAFE—no dangerous lunge when you reach the end of your cut—saw's weight rests on main piece.

SAFETY is just one of Speedmatic's 6 superior features resulting from Speedmatic's exclusive 2-Way Balance. One demonstration will give you the whole performance story, including: Safety, One Hand Operation, Power, Accuracy, Smoothness, Durability.

Try a Speedmatic at your dealer's today.

And that's not all ...

Your Speedmatic distributor has a complete line of these balanced, quality electric tools —saws, sanders, routers, mortisers, planes, grinders, floor sanders and edgers—and other masterpieces of balanced design.



#### Church 104 Years Old **Moved 250 Miles** With Aid of Crane

A 104 - year - old Congregational Church was dismantled and re-erected with the help of a Lorain Moto-Crane



CHURCH is re-erected at Birotford. Conother being dismunited and moved 250 miles with the help of MC-418 Loroin crone

owned by Consolidated Building Wrecking Co., Inc., of Bridgeport, Conn. The crane traveled from Stratford, Conn., to Brookfield, Vt., a trip of 250 miles that included nar-

#### Bruce Exhibits to Feature Flooring for Ranch Homes

Exhibits of the E. L. Bruce Co., Memphis, Tenn., at lumbermen's conventions this year will have a western theme, emphasizing the company's newest product, Ranch Plank Flooring which was developed for use in the ranch style house.

Panels of the prefinished oak strips in alternate widths with walnut pegs will be used in the displays. A bustess in cowgirl costume will carry out the

western motif.

Block and strip flooring and Bruce household products will also be included in the exhibits.

row, winding roads. There it was used to dismantle the church,

After the move back to Stratford, Conn., the crane was used to help re-erect the church as seen in the accompanying photograph, An eightyfoot boom was used with the crane.

It is estimated that the new owners of the church saved \$25,000 when the cost of their acquisition is compared with the probable cost of a similar new one.

The Moto-Crane used was manufactured by the Thew Shovel Conpany of Lorain, Ohio.



- any pitch on either side of the ladder.
- · Weight distributed on three rungs.
- 4 New, roll-type lock (right) uses side rolls of ludder for extra safety.

Write for Catalog M: complete information on all "Trauble Saver" Scaffolding Accessories.

- @ 3 and 31/5 ft. lengths-rail carbon steel.
- Nail, studding and bult-attached types. · Attachments to convert any one type to ony other type.

The Steel Scaffolding Co., Inc.

854 Humboldt Stroot, Dapt. AB, Brooklyn 22, New York . Telephone: EVergreen 3-9510

STATE



"It doesn't cost any more to build houses with genuine Heatilator' Fireplaces—and they're a lot easier to sell! I've been using them in my fireplaces since 1935."

Says Walter Kenney, Vice-Pres, and Chief Designer, George Wallace Realty Co., Ruffule Bailders.



HERE'S a big extra selling feature that makes houses move faster—and costs you little or nothing! Build your houses around the cheery glow of a modern Heatilator Fireplace—the Fireplace that circulates heat instead of wasting it up the chimsey. Savings in labor and materials usually more than make up for the small cost of the Heatilator Unit.

Assures correct operation. The Hentilator Unit is a scientifically designed, lifetime-built steel form around which you can build any style fireplace. It assures correct construction even by inemperienced masons and eliminates common faults that cause smoking.

 Seves you time end money. The Hentilator Unit adds little or nothing to the cost of the finished fireplace because it's complete from hearth to flue and ready to install. It saves on expensive firebrick.
 It saves mason time and labor because all designing is done. You save valuable time because the Hestilator Unit per-

 Circulotes heat, soves twel. The Heatilator Unit takes heat that is ordinarily wasted, and circulates it to every corner of the room... and to adjoining rooms as well. On cool Spring and Fall days, foroace operation is unnecessary. In mild climates, it's the only heating source needed. Hestilator Fireplaces are sold by all leading building material dealers. Accept no substitute. Look for the Hestilator name on the dome and on the damper bundle. Hestilator, Inc., 632 E. Beighton Ave., Syracuse 5, N. Y.

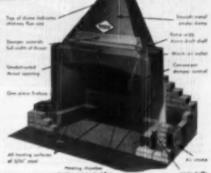
\*Hostilater is the reg. trade-



4. Makes any house easier to sell. It's the kind of quality com-

the kind of quality comfort feature today's househousters are looking for And they know the Heatilator name through over twenty years of national magazine advertising.

Write today for complete specifications and illustrations showing a variety of attractive fireplace designs employing Heattlator Units.



#### HEATILATOR FIREPLACE

Closes Sales FASTER!



#### Stanley Works Announces New Mobile Display Unit For Builders Hardware

The Stanley Works, New Britain, Conn., is taking its diversified line of hardware products on a nation-wide tour of inspection for hardware wholesalers, retailers and builders in a specially constructed motor coach. Designated as the "Stanley Hardware Rollorama," the new mobile display coach will carry over 1,800 sample items in the firm's builders hardware line. It will visit all principal cities in the country where it will be displayed under the direction of trained factory representatives.

The Rollorama is constructed on a standard M-passenger motor coach chassis with a modified body. The interior contains 24 hardware display panels which are uniquely arranged along the interior walls on both sides of swinging doors. Linoleum-topped counters with slanting front display panels give a modern store environment for the entire presentation. Interior fixtures are finished in prima vera. Forced ventilation and thermostatically-controlled heaters are installed. A lounge area is located at the rear of the coach where visitors may discuss requirements with representatives of the company.

Announcement of the Rollorama's itinerary will be made at a later date. Advance posteards will notify distributors when to expect the Rollorama in their territory. The Rollorama was designed and constructed by M. Rundhaken Displays, East Hartford, Conn.



THE Stanley Works hardware division. "Rollocame" which will tour America displaying the complete line of builders hardware

George P. Merrill, general sales manager of The Stanley Works hardware division says: "The main purpose of the Rollorama is to assist the entire hardware trade by bringing a completely stocked showroom directly to the leaders' doors. Aboard the motor coach, a dealer may examine the Stanley line at first hand, get help in his hardware problems from the Stanley factory-trained representatives. On special blanka which will be provided he may also have orders placed through his jobber."

## Sensational FLAMING Test...



Grdinary Ellingte Fire-Ches

Ordinary Stronger



Fire-Chas

Heat front flames causes asphalt cooting on ordinary shingle to burn, melt and flow, thus allowing flames to out through highly-combustible felt (this would expose roof dock to flames). Patented asbestos pisetic compound coating on Fire-Chex resists busning, melting and flowing . . . actually "puffs up" to insulate felt from flames and prevent sprihon.

Carey Fire-Chex asbestos-plastic shingles assure unmatched fire protection for valuable buildings and human lives , enhance the value of your building projects. This fact is dramatically proven by the flaming brand test shown above . . . a test you can easily demonstrate for your clients with the handy kit made available by Carey. Ask your Carey representative about it today.

#### YOUR CLIENTS WANT BEAUTY AND DURABILITY, TOO . . .

Carey Fire-Chex have both...in client-actisfying measure! They're made in a variety of rich new colors and blends-especially designed for application in copyrighted shadow-blend roof designs that cannot be duplicated...and they're extra heavy (325 lbs. per sq.) for extra durability and weather-resistance.

Whether your business is design or construction—insist on Carey Fire-Chex... the ultimate in fire-protection, beauty and durability... to help make any building a safer investment. (See Sweet's Architectural file for further information.)

#### Call in your Carey representative for full details.

The Philip Carey Manufacturing Company, Cincinnell 15, Ohio.
AS-2 In Canada: The Philip Carey Cumpany, Ltd., Montreal 25, P.Q.

THE HOUSE OF

Carey

Bathroom Cubinets and Assessaries . Corame Siding . Book Wasi Sants . Tri-tune Skingles . Other Samous products for boms and industry





#### **Asphalt Tile**



V Mare resiliency

/ Lighter colors / Greater color variety

d' Brighter colors « Groose resistence

#### . . PLUS ECONOMY!

Instaliation of AZPHLEX Asphalt Tile flooring adds a lot to the beauty, value and "livability" of any home—and the modest price tag on this premium-quality tile makes it perfectly in line for low and medium priced home construction! AZPHLEX goes in fast and with minimum difficulty... it has a protective, factory-applied wax finish that makes initial polishing rasy... it is colorful and attractive... and it offers maximum retistance to the effects of animal, minoral or vegetable greases, alkalis, alcohol and mild acid solutions. It will take a very high polish—and keep it for an exceptionally long time; and its resistance to denting and marcing in unsucpassed.

"From rosalts of national poll

TO LAT BETTER FLOORS FOR LESS.
AND HAVE THEM WORTH MORE
STICK TO
PREMIUM QUALITY

AZPHLEX

your Arouk Asphiles Designer or write direct to Dept. B.
UVALDE ROCK

ASPHALT CO. CERTIFICATION OF THE PARTY OF ASPARED THE PARTY SAME SEED SAN ANTONIO TEAMS

#### New Standards Announced For Pine Woodwork

A commercial standard for standard pine windows and sash, the first of its kind ever published, has been amounted by the Ponderosa Pine Woodwork Association. The new standards, which became effective Dec. 15, are expected to be particularly helpful to architects, builders and wholesale and retail distributors of woodwork products.

In addition to establishing specifications for standard sizes, layouts and construction details of stock pine windows, sash and screems, the standard is intended to effect economies for all concerned, from the producer to the ultimate consumer through a wider utilization of the products.

#### Complete Kitchen For a 5-Foot Space

A complete kitchen that occupies five square feet of floor space is one of the many interesting new products to be shown at the Annual National Association of Home Builders Convention and Exposition to be held in Chicago, Feb. 19-23.



COMPACT kitchen occupies 5-feet floor space. Will be shown at NAHB Expestion to be held in Chicago Feb. 19-23

The kitchen incorporates an electric range with four cooking units and full-sized oven; a sink which can be equipped with a waste disposer; and a four cubic foot under-counter refrigerator, A special plastic counter top including sink and howl fits over the refrigerator and sink cabinet, giving additional work surface. Above these appliances are two 30inch wall cabinets for adequate storage of dishes and other items in small apartment homes. A more complete apartment kitchen can be formed with the addititon of a free-standing automatic dishwasher which also fits a variety of counter tops. Kitchen is by Hotpoint, Inc., Chicago,





Available with ar

without broase covers that completely hide spring, on shown above.

#### PERMITS REMOVAL OF SASH WEIGHTS, INSULA-TION OF MULLIONS.

#### Slash Labor Costs'

Simple installation allows one mun to easily install 30 or more windows in \$ hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost . . . higher profit!

#### Tops in Operation!

Smooth, positive action; accurate balance; finger-tip control plus the perfect seal against draft dust, moisture. No wood-to-wood contact. Prevents sticking windows and window rattle.

EFFICIENT LOW COST



FOR OLD OR NEW BUILDING

ATTENTION MILLS AND LUMBER YARDS
IDEAL FOR PRE-FIT WINDOWS
Can Alto Be Sold in Single Unit Pechages

Mail this coupon today!

Milwestoe Strip Service, Isc. 4521-22 W. Lisbon Ave. Milwestoe 6, Wiccossis

Please rush me folder A-2 and price list of Milwaukee Combination Sash Balance Weather-

itene .....

Address

City Zone State



IN THE KITCHEN-Blo-Fan installs over the range, where it will whisk out steam, grease, and cooking odors as they rise before they spread.



IN THE BATH-Blo-Fan quickly expels steam from the bathroom-avoids foggy mirrors and steam-streaked wallsthe air stays crisp and fresh.



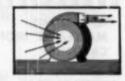
FAN-75% of the air moved by a breeze fan is thrown from the blade tips. The center is weak when it meets resistance. A fan delivers vol-ume, but it lacks power.



IN THE GAME ROOM ... Blo-Fan eliminates tobacco and other odors by removing stale air before it contaminates the drapes and furnishings. No morning-after odors.



IN THE LAUNDRY-In any weather Blo-Fan keeps the laundry clear and fresh. Steam is expelled before it spreads, windows do not fog...air is kept dry and crisp.



A BLOWER draws a smaller amount of air into the vortex. discharging it with great velocity, thus overcoming resistance. A blower delivers power, but it lacks volume.



Spot Ventilation at the point of Air Pollution



... the modern recessed lighting fixtures with snap-on fronts.

Factories: Pomona, California; Newark, New Jersey Warehouses: Los Angeles, San Francisco, Chicago Stocked by more than 500 wholesalers in more than 350 cities

Pryne & Co., Inc. ... bd. Forman California



Blo-Fan combines the volume of a fan with the power of a blower. The fan blades feed the vertex of the blower so the vanes are fully loaded. That's why Blo-Fan delivers more air with more power.

### A Quick, Attractive Finish



Cabot's Stain Wax is quick and easy to use . . . with one application produces a soft, lustrous, easy-to-clean finish . . . available in a variety of attractive

light shades including grays and white.

Development builders use Cabot's Stain Wax because it gives interior woodwork many unique and attractive effects . . . because it costs less and is quicker to apply than paint . . . because its clean, modern appearance appeals to today's home buyer.

Write for complete information and color card. Samuel Cabot, Inc., 224 Oliver Building, Boston 9, Massachusetts.

### CABOT'S

### MONARCH

FOR ASBESTOS SIDING AND SHINGLES GUARANTEED 100% Non-Breakable

NOW, AT LAST MALLEABLE IRON CASTING

The Monarch Asbestos Siding and Shingle Cutter in mollosible iron gives you the 100% guarantee against broken eastings. Because of its metalturgisal struct-ure, malicable iron is the ideal material for this sut-ter. The Monarch gives greater tanghest, higher se-cutil stand on the heavy and will stand up to heavy and repeated impact.

The Monarch has a front end ness punch, natcher, and precision sutting blades.

Angle guage is optional.

27" Menarch . . . \$39.50 32" Monarch . . 45.00 (FOB Fort Worth, Toxas) WRITE FOR FREE

TRI-STATES **Building Materials** Company, Inc.

P. O. Box 1476 Fort Worth, Texas

Address



#### MAIL THIS COUDON

| TRI-STATES BUILDING MATERIALS                                    | CO.            | AB      |
|--|----------------|---------|
| Please send me, without obligation,<br>Currer in multishle iron. | information on | Monarch |
| Name   |                |         |
| Company  |                |         |

#### **Florida Apartments** Designed For Room Air Conditioning

Wall openings for room air-conditioner window ducts are a construction feature of a new apartment building in Orlando, Fla. The owner,



EXTERIOR view of Orlando, Fla., apartments. Outside wall openings have been skillfully blended into the building design



CARRIER De Luxe Air Conditioner unit, in corner of room, is feature of apartments

who air-conditioned each apartment with individual Carrier Corp. room units, has reported 100 per cent occupancy for the building, even in summer months. The air vents were planned as part of the design, harmonizing with other exterior decora-

The individual units are installed in a corner of the room, permitting fulllength window light and vision.

#### F. W. Dodge Corp. Plans Full Representation at NAHB Most

All of the divisions of the F. W. Dodge Corp. will be represented at the NAHB convention in Chicago, Feb. 19-23. Company officials said that members of the sales staffs of each division, together with special marketing consultants, would be in attendance during the entire meeting.

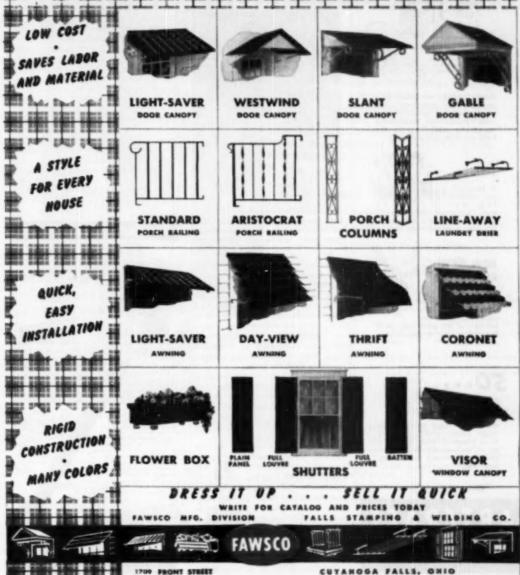
One of the firm's displays will be a special demonstration of the Chicago Construction News, daily building trade newspaper.

> See Selected Homes MARCH American Builder



### REDUCE BUILDING COSTS

Pre-assembled DOORWAY CANOPIES
Pre-painted ALUMINUM SHUTTERS
Low cost PORCH RAILINGS



### DISTRIBUTORS! DEALERS!

We're buried in SALES
... need help to dig out!



A few years ago, we started making the finest ornamental iron work skill can produce. Our costs were low and, not knowing bester, we said direct to the building trade and architects.



We got behind and don't know when we'll catch up. We need help! If we can get out of the sales end, we'll have more time to manufacture and design.

If you're a distributor or dealer who can handle the finest ornamental iron work made (nice profit—you'll like it)

(nice profit—you'll like it) wire, 'phone or write. There's a lot of business all ready to be picked off. Plenty advertising help, too.

Write to Dept. A

ARTCRAFT ORNAMENTAL IRON CO.

#### New Idea For Production-Line Building of Single Homes on Individual Lots

Individual houses constructed with all the savings of production-line building are being produced by the Schrader Development & Supply Co., St. Louis, Mo. The Schrader organization, a pioneer in the use of specialty crews and assembly line building in sub-division development, has a new plan for constructing a single home for an individual on his own lot.



WALL sections, porches and other building parts are produced and assembled in large plant utilizing tast power tools

In a large plant, Schrader preassembles walls, porches, and porch canopies sending them out completely finished. Using the latest in power tools and advanced building design, all interior doors are fit, locked, and ninged in the jamb and are ready to be nailed in the wall openings. Trucks and trailers deliver the building parts completely assembled to individual home sites and experienced crews erect and finish the house.

Actual construction of a Schrader home has averaged 40 working days. Stock piling of building materials and continued maintenance of full working crews for both on-site and plant operations have aided in maintaining unusually speedy production.

The home plan selected for the Schrader pre-assembled project measures 25 x 32 feet with almost 800 square feet of floor space and full basensent. Two bedrooms, living room, bath and large kitchen complete the structure. The home is priced at \$7.875 with asbestos siding plus cost of sanitary sewer connection and gavage. Brick veneer is also used with the customer paying approximately \$1.200 additional.

The foundation is of poured re-

inforced concrete. Exterior walls are framed in units in accordance with a key plan which is illustrated, using Insulite Bildrite Sheathing applied directly over 2x4 study placed 16 inches O.C. which are dudwed to receive 1x3 horizontal strips serving as a mailing base for the asbeston shingles. Bildrite Sheathing provides both structural strength and needed insulation. Dado news are used by Schrader at his plant to accurately cut the 2x4 study so that the furring strips may be let-in and form a flush surface.

Exterior walls are sided with asbestos stringles and roofs are of asphalt shingles. The floor is hardwood, except that kitchen and bath have inlaid linoleum. Interior walls are of dry wall construction, some painted, some papered, and bath and certain kitchen areas are finished with Insulite hardboard wainscoting sprayed with synthetic enamel after being cemented in place. The kitchen is furnished with a 54 inch deluxe cabinet sink, one 15x30-inch wall cabinet, one Mx30-inch wall cabinet and one 15-inch base cabinet. In the basement, there's a gas-fired autonatic botwater heater.

Gravity hot-air heating with a coalfired furnace is the normal heating system supplied with the Schrader (Continued on page 258)



Only SUPER-CEDAR is of the same uniforms high quality standard that guarantees over package for package in contain 90% Res Rest of ketter, and 100% oil content that produce the pleasing arems.

Suggest Coder Lined Closets to Every Home Builder. Thorse in Bothing Better than SUPPLY SUPPLY

BEALED

LABELED

ALL WIDTHS PUT-UP

More home builders are specifying sedar lined closets today than ever and Brown s SUPERCEDAR is ne-tonally advectued to thousands of new home prospects.

CEDAR closed lining is surfamed, tengen and grouved, ready to put on with no wate. Packaged and esaled with the Geo. C. Brown label and greatone, formers since 1806.

GEO. C. BROWN & CO., Inc.

LARGEST MAN TACT FRENCH

### Reversible

TO HELP YOU LOWER BUILDING COSTS



Richmond steel frame tambs are reversible so they can be used for either hand of the door. Hinges are welded to hinge jumb the same distance from either end. Latch cutout is centered in latch jumb. Jumbs can consequently be used on either side of frame. Being reversible and coming in three pieces makes ordering easy and reduces to a minimum storage space required.

STEEL FRAMES

#### **Check These Features**

- Low in cost-sturdy in construction
- Made of best quality 18-gauge steel
- M Available for interior and exterior openings
- Frames are neat appearing, stable, durable
- → Rolled sections insure occurate dimensions and perfect
  fit whoù assembled
  - Hinges welded to jambs in manu-
  - Jamb members are equipped with clips for solling to study or strap eachers for mesoary walls.
  - " Frames eliminate acod of casings
  - Red exide primer coat baked on at factory
  - Sises: Width—1'6" and up in 2" multiples Height—6'6"; 6'8"; 7'8"

MAIL COUPON NOW for full information about Richmond Steel Frames

#### EASY TO ASSEMBLE

Frames readily assembled on job. Just insert metal tengues of jambe into morties in head member and bend sufficiently for firm, square connection.

THE



P. O. Box 97, Friends Station

Birkmand Indiana

THE RICHMOND PIREPROOF DOOR COMPANY, DEPT. 2 P. O. BOX 97, FRIENDS STATION RICHMOND, INDIANA

PLEASE SEND ME booklet giving full information about Richmond Steel Frames.

NAME

BUSINESS ADDRESS

CITY

ZONE STATE

POSITION

TYPE OF BUSINESS

American Builder, February 1950.

For Quick, Easy, Full-Powered Sawing—This 6" Bradford Can't be Beat!



### New Model 160 BRADFORD



- Straight out, 2" maximum; 1/4" minimum
- Bavel cut at 45°, 1¼" maximum; ¾" minimum
- · Net weight 10 lbs. 4 oz.

Here is a real heavy-duty 6" power saw! This new Bradford Model 160 is ruggedly constructed and fully powered to take on the toughest sawing jobs! It's light weight and finely balanced to give greater sawing accuracy with less effort. Powerful motor drives the blade at 4000 r.p.m. Arbor is mounted on sealed ball bearings. Constructed by craftsmen for craftsmen to give years of efficient service. Ask your dealer to demonstrate this precision power saw.

### THE BRADFORD MACHINE TOOL COMPANY

654 EVANS ST. CINCINNATI, OHIO

#### New Idea for Production-

(Continued from page 256)

homes. In some cases a forced air, gas-fired heating plant has been installed.

When the pre-assembled building parts arrive at the site, the units are laid on the subfloor and assembled



WALL panels illustrating 2x4's dadanamed for receiving 1x3 harisontal wood nating base strips are shown here. Interior walls are of dry wall type using other paper or paint covering

according to the key plan. The door frames and pre-fit windows are nailed in place. The Bildrite Sheathing is all precut to sizes required for each unit and is nailed in place after the door and window units have been properly placed. Then the asbestos shingles are applied. The wall is raised in place with the exterior being complete. First the front wall is raised; second, the rear wall; third, an end wall. Then all interior partitions are placed on subfloor. The fourth wall is then raised in place. All corners on exterior walls are bolted together. The partition walls are set and spiked in place. All roof rafters and ceiling joists are precut in the plant and the building is put under roof in 352 days with a crew of four men. All rear porches, front porches,



HOMES, 25x22 feet, have full basemen

front porch hoods, and basement stairs are pre-assembled and painted, then taken to the building and erected. The interior trim for all windows and doors is pre-fit.

Since the beginning of their semiprefabrication operation last spring, the Schrader Development & Supply Company has erected 30 structures using this newest idea in home building.



KORK-PAK is composed of cork grasules bonded together with asphait between two sheets of asphaltsaturated paper—it's waterproof and insect proof to assure positive joint filling for the life of the building.

KORK-PAK is the least expensive non-extruding joint filler made—low cost, coupled with its high insulation coefficient, makes KORK-PAK the ideal joint filler for any type of construction.

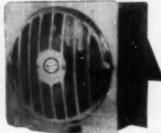


Write for complete details on KORK-PAK. See our Catalog in SWEET'S.

SERVICISED PRODUCTS CORP.

### WESTAIR KITCHEN VENTILATORS

CEILING AND SIDE WALL MODELS



SIDEWALL MODEL

Highly polished cast aluminum grill, 16 ioch Torrington blade, one piece rast aluminum abutter, wide overlapping, cast aluminum hustter, wide overlapping, cast aluminum frame for simple installation in old sed new houses, easy to clean, poll chain automatically starts fan and opens outside shutter. When ordering specify frame of brick.

### 5 YEAR GUARANTEE

TOUR CUSTOMER DESERVES THE BEST WHOLESALE PRICE CEILING FOR SIDEWALL

SINGLE UNIT ... \$27.97 LOTS OF SIX ... \$23.97

WESTERN APPLIANCE CO., INC. 1450 Groad River. Butrait 8, Mich.

### **Equipped with NORGE Appliances**

Home buyers are more choosy now. They want more for their money. And they want a "packaged mortgage" so that they can pay the cost of necessary home appliances over a long period of time...the duration of their house mortgage. Builders everywhere find appliance-equipped homes sell faster, easier.

### WISE BUILDERS INSTALL NORGE! and with Good Reason!

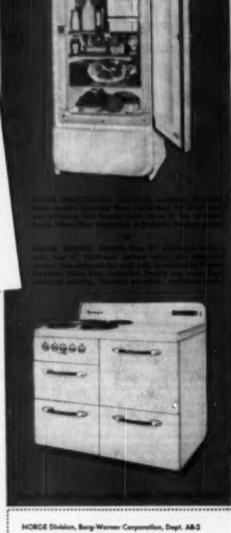
You know that in practically every case it's the woman who chooses the home. You know that the kitchen is the hig selling point. And the kitchen equipped with Norge is a sure winner.

First, because Norge is a famous national brand. Every woman knows the name. Every woman recognizes the value. And the husband knows that "Borg-Warner" stands for the best in engineering.

Second, individual Norge appliances sell themselves . . . and your house along with them. Their beauty lends glamour and drama. And each appliance is jam-packed with the features every homemaker wants.

And the builder himself finds that the Norge price is right.

So when you install Norge appliances, you add much more to the value of your house than the price of the appliances themselves. You assure yourself of faster-moving units...and greater profes.



Detroit 26, Michigan

Att.; Mr. S. J. McCarthy, Director of Contract Sales.

Please sand me more information on the following appliant

- ☐ Refrigorator
- ☐ Water Heaters
- Automatic Washer
- Gus Range
- ☐ Mactric Range
- Home Heaters



- Designed in collaboration with America's largest builders... for quick, easy, inexpensive installation.
- New FASCO Turbo-Radial propeller, specially engineered for pressure through ducts... develops pressure unobtainable with ordinary fan blades... three-speed control.
- Unique air intake prevents air re-circulation at inlet.
- Outside wall cap—aluminum

   rustproof—has built-in
  balanced louvres. Overhang
  keeps out rain, drafts, cold.
- Beautifully designed... superbly finished... priced right.

FASCO wall ventilators are used by America's largest buildors . . . 15,000 IN LEVIT HOUSES ALONE: The new FASCO "CER.N-WALL" vent will be a leader, tool

WRITE, WIRE or PHONE for complete information. FASCO Industries, Inc., 20 Union St., Rochester 2, N. Y. (Phone HAmilton 1800).



#### Builders' Competition For 'Best Hames' Announced By Parents' Magazine

To spotlight the pacemaking work of the nation's leading home builders, the publishers of Parents' magazine have announced a contest that is intended to turn the eyes of American families with children on the building industry in an effort to find and select the best houses for family living built and sold in 1949.

To be eligible for competition, a house entered by a builder must be occupied by a family with one or more children, according to Mrs. Maxine Livingston, Family Home Editor of Parents' magazine. Entries will be divided into five regional groups according to geographical locations, and entries will be divided into two price groups based on actual selling price:

1) houses sold for not more than \$15,999 and 2) houses sold for from \$15,000 to \$25,000. Selling price to include the cost of land.

Entries will be selected for 1949 Merit Awards; one in each cost class for each of the five geographical regions. From the ten Merit Awards, one house will be selected for the 1949 National Merit Award for the "Best Home for Family Living."

Awards will be Certificates of Merit suitable for display and use in advertising by the winners. Parents' magazine will publish and publicize editorially the 1949 National Merit Award and reserves the right to do so with any or all of the nine 1949 Merit Award winners or with any other entries selected by the editors.

Entries must be received not later than May 1, 1950; prize winners to be announced early in July, 1950, Jury for Parents' magazine's Home Builders Competition will consist of the president of the National Association of Home Builders; Richard Bennett, A.I.A., Loebl, Schlossman & Bennett; William H. Scheick, A.I.A., Executive Director, Research Advisory Board of the National Research Council; Mrs. Maxine Livingston; and five regional advisors. Further details of the competition may be obtained by writing to Builders' Competition for Merit Awards, Parents' Magazine, 52 Vanderbilt Ave., New York 17, N.Y.

#### **Perlite Plans Expansion**

A \$100,000 modernization program which is expected to triple production capacity has been undertaken by the Perlite Manufacturing Co., Carnegie, Pa. T. C., Ward, company president, said that conveyor systems, bins and an additional furnace would be installed for processing the lightweight aggregate, perlite.

### STAPLE—to save time speed up production



T-32 Gun Tocker

Repinces hammer and tacks at tripper rate speed, Shoots a steple wherever a tack can be driven, Ideal testement for Corporaters, Insulators, Boolers, etc. Special screen and window shade attachments. Loads 158 steples—3/16", 16" and 5/16", 38.58

Bustproof "Mone!" stoples available.



P-22 Hood Stepler
Bearter into hard-teper-of places." Sided for
maging, wropoints, meling hops, etc. Sector Mocitize takes "s," and 5, 10"
staples, knode (50 staples).



in 106 Stundard
Stantor, Tarker and Place,
Femperary and person
cont stitch. Precinition
built of all shed will
obscume being. Fastors up
to 40 sheats of pages, beside
105 standard stagion.

Stightly higher to the West and Connés

BUY FROM YOUR LOCAL BEALER OR ORDER DIRECT-DEPT. AB

ARROW FASTENER COMPANY, INC. 30-38 Maujer St., Brooklyn 6, New York



### The RANGE-VENTOR SELLS HOMES

Without a Range-Ventor even today's modern and beautiful kitchens are incomplete. Not only dose this handsome, eye-filling piece of equipment capture and exhaust kitchen odors, grease and heat at their source—showe the stove—but it is a selling feature that has instant appeal. It ventilates, it illuminates, it protects walls and cabinets . . . and it selfs homes.

Send for Bulletin 580

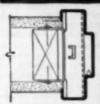
Universal Blower Co. Birmingham 2, Mich.

### AMWELD

### Interior STEEL DOOR and FRAME UNITS

Designed to meet tuday's modern construction standards, they blend with all types of architecture, and lend themselves to installations at rates up to five times as great as those where "assembled-on-the-job" units are used.

Doors are available in 1%" and 1%" thicknesses; 1%" available as single-swing or double-acting. These doors may be provided with integral louvers or vision panels. Doors are factory rabbeted and bored for standard hardware. Frames and hinges are furnished as a one piece welded assembly. To insure parallel alignment, removable steel spreaders are welded to bottoms of the frames. Doors are furnished with a neutral color primer, electrostatically applied and controlled; frames are rust-resistant primed.



AMWELD Steel Frames are used in all types of wall construction.

### AMWELD

### SLIDING CLOSET

Sliding closet doors have definite advantages in the saving in space and increased accessibility to closet content, plas saving in initial construction cost. Steel door panels are formed on four edges, fitted with finger pulls. Jambs, header and track — the same high quality and construction as door frames. Available for 3', 4', 3' and 6' openings — 2 doors. AMWELD Steel Sliding Closet Door Units are also available in packaged, knocked-down units. Here's a fast turnover, profit-making line that will pay you to investigate.



VISIT OUR BOOTH, No. 6, gat the MATIONAL HOME SUILDERS SHOW Compress Hotel, Chicago, Feb. 19-23

Building Products Division

THE AMERICAN WELDING & MANUFACTURING CO.



### There's only ONE-

Various limes come from Ohio . . . they're OHIO limes.

When more or less white . . .
they're called WHITE limes.

When sold for finished plaster . . . they're FINISH limes.

 Some may even come from Ohio, be white, and be meant for finishing limes...

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They are easily recognized by the Zigzag Bags.

The OHIO HYDRATE & SUPPLY Co.



#### Sales Ideas for Builders Who Do Farm Construction

Contractors and dealers who do business in rural areas can give furners two easily understood reasons why a machine shed is an inexpensive building to own.





OPEN-SIDED machine shod, top, appeals to insmers because of its inexpensiveness. Framing lumber, siding, roof deck sheathing and asphalt routing are the only major materials required. This type of shed pre-tects farm implements from all except the most severe storms. The enclosed shed is slightly more elaborate in construction and frequently includes a repetit shop as well as machinery storage space.

First, a machine shed usually will pay its own cost by preventing rapid rusting and depreciation of machinery. The vulnerable working parts of tractors, harrows, cultivators, hay rukes and similar implements are exposed, and if machinery is allowed to stand outdoors it can become harmfully wet in even a light rain fall.

The second reason is that a machine shed is simple to construct and costs relatively little. Advantages far outweigh the expense.

The most popular type of machine shed is open along one or both sides and closed at the ends. It is covered by a gable roof. There is no need for sloors or windows. A dirt floor usually is sufficient.

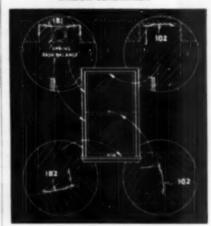
Much of the protection afforded by this sort of structure is provided by the roof, and thus it is important that reliably weathertight roofing be selected. Asphalt roofing serves this purpose and also contributes to lowcost construction because it is inexpensive and easy to apply.

Another type of machine shed is enclosed completely, with one end equipped as a repair shop. This arrangement makes machinery conveniently accessible for repair work regardless of the weather.

Both types are preferred by some farmers. The open-sided shed is used for storing bulky machinery while the enclosed shed has space for smaller implements and repairs.

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Furthermore, it has greater insulation value (.24K factor)—is flameproofed—resists moisture—does not deteriorate with age—will not mildew or attract vermin.

For better insulation at lower cost, try Lo-K. Compare the cost. Ask your workmen which insulating material they prefer to use. Lockport Cotton Batting Co., Lockport, N. Y.



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You will find that it wan't flome—merely chors without floming—won't melt or full aport. Thei's why it acts as a fire stap. Furthermore, Lo-K's flomeproofed qualities are permanent.



#### TEST IT FOR MOISTURE RESISTANCE

Float it for days on top of a pan of water. Secures Lo-K does not absorb moisture by conflictly attraction, only the part in contact with the water will be wet.





One touch of your finger will tell you why wood
windows maintain their widespread popularity.
For wood is a natural insulating material. It retards
transmission of heat or cold, minimizing dimensional
change due to temperature variation. Ponderosa Pine's
low density, smooth texture, and uniform grain provide a
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tested industry standards. Preservative treatment of
your Ponderosa Pine windows gives added resistance where
staining, decay, insect attack or humidity are problems.

#### Chicago's New Code Not Expected To Stimulate Construction

The new "performance" building code recently passed in Chicago will benefit all types of construction in the long ran, but it is doubtful that it will produce an immediate boom in small home construction within the city limits, according to the Chicago Metropolitan Home Builders Association. And few, if any, prefabricators will be able to adjust their designs and operations to meet the rigid small home regulations of the amended code Martin C. Huggest, executive vice president of CMEBA, reported.

A serious obstacle to rapid building progress within the Oricago city limits, according to Huggett. Is the "compromise" amendment reached by Mayor Martin H. Kennelly December 29 after a two year struggle between the building industry and civic groups backing the "streamlined" code, and plastering groups opposing it.

The compromise amendment permits construction of non-bearing partitions of materials having:

 A fire resistance rating not less than a wood stud partition covered on both sides with one-half inch exterior grade plywood.

2) A flame spread rating not to exceed thirty.

 Withstand an impact equivalent to 60 pounds to 3½ feet.

The acceptability of virtually all materials under paragraph 3 will remain uncertain until the building code administration is set up and the tests are defined more clearly, Huggett said.

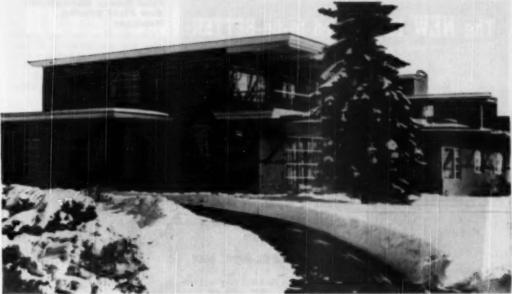
In any event, according to Huggett, it appears that the performance requirements established in the new code will require the use of materials that will increase the cost of small homes built outside the fire zones in the city materially above the cost of homes now being built in suburban areas outside of the city limits.

Other obstacles to volume home building within the city were cited by the Chicago Metropolitan Home Builders Association.

The first is the extension of "fire limits" in which frame construction is barred to the point where they now embrace 175 of 211 square miles within the city. The most desirable areas for small homes now fall within the "fire limits."

The second is the shortage of land priced low enough to be included in a "small home" package price. Seeking to break this shortage, the Committee on Housing Development of the CMHBA is working closely with

(Continued on page 266)



Residence of Horry L. Magae. Architects, Berninger, Hoog & d'Estremont; builder, Party Swank



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#### Operator 4703W

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Any CASEMENT WINDOW is only as good as its operator. The operator is the control tower of the window's flight. It must secure it instantly, rigidly, in any position desired. It must respond to the touch of a finger. Being an interior fixture, the operator must be graceful; having to live a lifetime of twists and turns, it must have guts,

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and modern times. The principle of the Arch is used to produce the excep-

This new hollow-core door is of balanced, cross-grained construction to

Because we use selected straight grained materials in the rails and stiles,

the door edges plane smoothly and easily, hinges are mounted quickly and cleanly—acrews hold permanently. This workability makes faster, easier installation a sure thing with the Haska door. Up to 1" is width and 2" in height may be trimmed if neces-

tional strength and warp-resistance of the Hasko Arch-Kor door.

Fred Kaiser Honeywell's New Field Service Manager

Creation of a new management sales post and promotion of four branch and regional managers have been amounced by Tom McDonald, vice president in charge of sales for the Minneapolis-Honeywell Regulator Company.



Fred Kaiser, midwest regional manager for the company since 1943, has been promoted to field sales manager. This position is new to the company, McDonald said, Kaiser joined Honeywell's New York office

in 1926.

Clarence L. Peterson, who has been Pacific regional manager for Honeywell, will succeed Kaiser in the midwest area. Gavin S. Younkin, formerly Los Angeles branch manager, will assume Peterson's former duties. In addition, the appointment of Reginald C. Cushing as the San Francisco branch manager has been announced.

### Chicago's New Code

(Continued from page 264)

representatives of the Chicago Land Clearance Commission, the Chicago Plan Commission, the Cook County Housing Authority, the Housing Authority of the State of Illinois and other governmental bodies. These groups are seeking a formula for private industry-government co-operation that will encourage construction of both small homes and private rental apartments within the city.

Until these groups succeed in a program for acquiring land for private development through co-operation of government bodies, the majority of home building must continue in the suburban areas. Huggett said. Of the approximately 28,000 dwelling units begun in 1949, in the Chicago Metropolitan area, more than two-thirds were outside the city limits. This ratio will probably continue throughout 1950, despite passage of the Chicago building code.

TESTS PROVE ARCH-KOR QUALITY

HOT SOX -WET SOX TEST A Honko door won placed in a dry kin at 170° for 48 hours then moved to a room with the humidity controlled at 95%. Here it remained 164 hours. Inspection found so change from its cripical perfect on

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#### Cecil W. Farrar and F. B. Maheney Given New Posts With Richmond Radiator

John J. Hall, president of Richmond Radiator Company, has announced the election of Cecil W. Farrar as vice president and general manager of sales and F. B. Mahoney as vice president and general manager of manufacturing.



CECIL W. FARRAR

Farrar has been associated with the plumbing and heating industry for more than 30 years. Formerly president of the Excelso Products Corporation, he joined Richmond as sales manager of the plumbing division in 1945. In 1948, he was appointed director of sales promotion for all Richmond products.



F. B. MAHONEY

Mahoney joined the Richmond Radiator Company as general factory manager in 1944. Prior to that time, he was vice president in charge of production for the Ellwood Company and previously was vice president and director of manufacturing for the Humphreys Manufacturing Co.

Mr. Leonard P. (Cy) Jenkins has been appointed Assistant Sales Manager, Plumbing Division of the Richmond Radiator Company. Mr. Jenkins, who joined Richmond in April 1946, was formerly Director of Sales Promotion for the Barcley Company of Newark, N. J., and Assistant Sales Manager of the Service Supply Corp., Philadelphia, Pa.

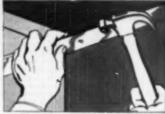
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### this new easy way

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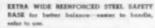
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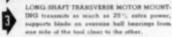


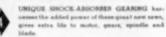
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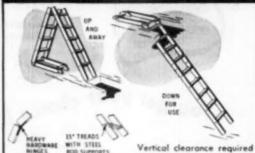






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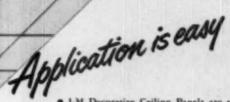
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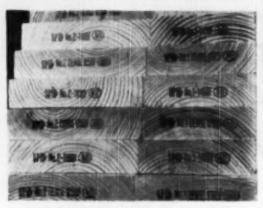
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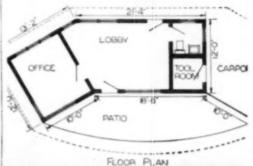


A CANOPY, six feet wide, with flush lights on under side, extends excess front

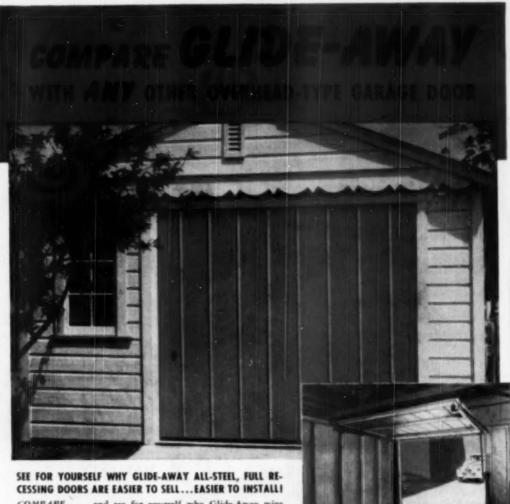
THIS used car-lot office can be readily moved since it is constructed on a single concrete slah separated from the main slab, covering the entire lot, by a waterproof membrane. High gloss paint was used on the exterior—vertical red fir 6-inch siding. The interior walls are finished with large panels of hirch veneer. The ceiling is covered with 12-inch x 24-inch insulating board. Two electric heaters with blower lans furnish heat. Floors are covered with asphalt tile. Roscoe Perkins, Oregon builder, constructed this office for May and Mead Co., Eugene, Ore.



PYLON 24 feet high, with steel frame, accentuates design motif



SEMI-CIRCULAR floor plan of this building is integral part of unique design. Plan is functional, with carport at right conforming to shape and position of office or appeals side of labby. Broad partie is located for easy access to all parts at building.



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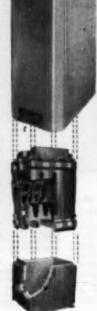
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American Builder, February 1950.

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The cleaner home . . . the well-ventilated home ... is the home that sells. The new Westinghous, Poweraire Home Ventilator, with the Air-Injector Grille, will help to keep your home bright and clean. It can completely change the air in an average kitchen every TWO MINUTES.

#### LOOK AT THESE ADDITIONAL FEATURES!

- a Insulated suitide deer
- \* Easy to install in practically any wall thickness
- s White, snup-en, Air-Injector grille
- a Busy to clean
- Single pull-chain cost Sconomical to operate

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Appliance Div., Dapt. A. Springfield Z. Mast.

YOU CAN BE SURE .. IF IT'S

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### KITCHEN IN A ... BIG WAY

Fits the Big Kitchen in the Right Way . . . Fits the Budget in the Way You Like Best!

Already the "Rancho" is a spectacular success! 48 hours after the first announcement, builders all over the country burned up the wires for complete specifications. These "Rancho" Ranges take so little space... only 58" x 24%". On top of that, because of Zero Underwriters Rating, the "Rancho" can be butted against surfaces of any kind... to save still more space. And the opening under the surface units is a tuck-away space any homemaker will welcome. You'll like the flexibility of installation of a "Rancho". Prospects will like the four, full-sized surface units, large oven ... and the Westinghouse label that promises top quality. Equip your kitchens with these new Westinghouse "Rancho" Speed Electric Ranges ... and have a sales plus that clicks.

Write for particulars on this and other Westinghouse Appliances designed to make properties sell or rent faster

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Appliance Division • Mansfield, Ohio

Plants in 25 Cities, Offices Everywhere
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Tuck-away space for the kitchen stool, the wastebasket, anything needed handy, but out of the way.



Extra large True-Temp Oven gives Balanced Heat for baking, No-Draft Heat for roasting, redient Glow-Heat for perfect broiling.



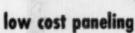
Four fast "COROX" Surface Units—two giant 8" and two 6" units, all with five controlled heuts.

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As manufactured by member mills of the Western Pine Association, it cames to you carefully graded and well seasoned. Ask your dealer about it and write for our White Fir Species Book which describes fully White Fir's qualities, grades and uses.



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These are Associated Woods Land \* Dauglas Fir \* White Fir Sprus \* Coder \* Ladgepole Pine

Well manufactured—thoroughly mainted—carefully graded by all Association member mills



Building contractors find that they can simplify the application of wall board, building paper, insulation batting, foil, etc., by using the Hansen Tacker. This speedy, convenient tool drives home stout two-legged tackpoints—fast as you can grip it. It holds scores of tackpoints at a loading—and reloads in a jiffy. It gives a great saving in time over old-fashioned methods.

A. L. HANSEN MFG. CO.

Pshe goes!

Up goes building material and up go buildings — faster — with King Hoists on the job. 7 models to select from. Portable—one man can handle and operate. Model 450, 7.6 h.p., hoists 1,000 lbs. 150 ft. per minute. Built to last. Returns its cost on a single job.





Model 560, 7.6 h.p., hoists 1,000 lbs. 150 ft. per minute. Spool is 7" dia. center, 15\frac{1}{2}" dia. ends, 12\frac{1}{2}" long. Compact. Hundreds in use. Made by makers of King Winches, Incline-Track, Pulleys, Safety Hook.

KING MANUFACTURING CORPORATION

### Cimerican Kitchens Put A Valuable "Seal of Quality" on Your Homes!



### American Kitchens Give Prospects Confidence That the Hidden Materials You Use Are Best Quality, Too!

Only a Man from Mars-with X-ray eyes-could tell what's behind the plaster in the homes you build.

Yet you want to proce to your prospect that you've used top-quality materials throughout.

Install a famous American Kitchen and he'll be assured! Because, being a sound business man himself, he knows you wouldn't put an American Kitchen in a shanty-built house!

#### Save Money, Too!

It may surprise you, but - despite their fame and certified high quality-American Kitchens actually cost less per running foot than quality wood cabinets, so



AMERICAN CENTRAL DIVISION



CONMERSVILLE, INDIANA

you can afford to use them in even your budget-priced homes.

#### SPECIAL ECONOMY SINKS

The country's lowest price for this high quality. 3 models -42", 54", 66" (twin bowl), Some quality as de fune styles, but without accessories.



### FREE-NEW 1950 BUILDERS FILE

American Control Division, Bogt. AB-3 **AVCO Manufacturing Corporation, Connersville, Indiana** 

Please have my nearest American Kitchens supplier furnish me-without charge or obligation-your new builders File, complete with specification and roughingin disgram

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### Harricane and Bilssard tested . . The Mismi Aluminum Awning Window is accepted in every area of the country, for every type of building . . residential, public and commercial. Constructed from 635-T5 non-corresive aluminum alloy, the Miami Awning Window requires no painting, no repair, no maintenance of any kind. \*One remote control operator opens 2 to 6 windows, \*Hopper Vent may be specified . . Opens inward for indirect ventilation. \*Windows are recessed for Screens or Storm Sash. \*Flanged Vents seal shut through double metal contact. \*No Weather-Stripping is Required. \*Standard, Modular or Custom Window sizes may be specified, Air Infiltration Tests Passed at Pittsburgh Testing Labs. DEALERSHIPS INVITED! This easy to sell, nationally advertised all-aluminum window means big profits to qualified dealers. See it in February, Architectural Forum . . Sweet's Assistectural File, \$\frac{1}{2}\$ or write . MIAMI WINDOW CORP., DEPT. 8, 3631 N.W. 38th AVENUE, MIAMI, FLORIDA, OR . INDUSTRIAL MACHINE TOOL COMPANY, INC., WINDOW DIV., DEPT. B 301 S. OAK ST., FENTON, MICHIGAN

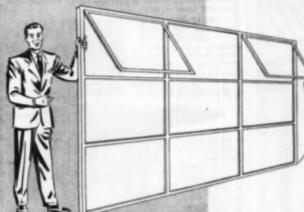
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MIAMI AWNING WINDOW

### FOR BUILDERS OF

### RANCH TYPE HOMES





### NOW A BIG VISION WINDOW UNIT IN ALUMINUM

### **ALWINTITE'S new VIEWALL**

ALSO NEW LOW TYPE DOUBLE-HUNG WINDOWS in standard widths and 2'4" or 3'0" heights

25 STOCK SIZES and STYLES TILLABIC CO

MEET F.H.A. REQUIREMENTS

AVAILABLE NOW! - ALWINYITE's new "Viewall" -a complete aluminum window unit measuring 9'0" x 6'0" with 9 lights and 2 projected vents. Just the unit for your new ranch-type houses.

And-this is real news-the first cost of this strong, extruded aluminum unit is usually less than similar windows in other materials. You also save real money in materials and labor when you prepare these big-unit openings. Viewall is easy to install. It has stainless steel hardware and can be putty glazed or used with special snap-on glazing beads.

ALSO for ranch-type houses, ALWINTITE has added several new low window sizes to its double-hung line. They are made in standard widths and 2'4" and 3'0" heights. Set high in the wall, these windows are ideal for any room where you want adequate lighting and ventilation plus a maximum of privacy.

### TTEE CATALOG AND INSTALLATION DETAILS

See the complete ALWINTTE line at your dealer's today or write for Free Catalog and Installation Details. Address Dept. AB-2.

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a subsidiary of Ganeral Bronze Corporation

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IN SUMMER ... Ital-Cotton stops best .. keeps it from coming inside. Only three inches of this exceptionally efficient insulation puts an effective barrier be-tween the sun's hot rays and the building it intulates — lowers temperatures as much as 12 degrees.

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Weight only about 210 pounds per 1,000 square feet. 5 inches thick, including vapor barrier, making it vantually casy to handle and install. Now labor on do the job as approximately 1/9 per square frost in attics—m special tools required.

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### INSL-COTTON DIVISION TAYLOR TEXAS & BELTON, TEXAS

Originators of Flame-Proof, Fire-Batarding Catton Insulation

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Many contractors write:

"Here operated a number of machines, but the MASTER is the brasel and fastest of  $\alpha B^{\prime\prime}$ 

BUILT FOR LONG and ACCURATE SERVICE

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Operated with selp 12 Machines in 1

MASTER is the only full UNIVERSAL WOODWORKER on the market.

A real portable s that you can take right on the job and do your rough and finish work with only one mochine.



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### It's Easy... It's Economical!



HERE'S HOW: Be free of delays when the building is ready for the chimney . . . get fast action, just phone your VAN-PACKER dealer and ask him for the

#### VAN-PACKER PACKAGED CHIMNEY

Easily installed in 3 man hours by a shoot metal man or carpenter. Light weight. Needs no foundation.

### ENTIRE CHIMNEY SHIPPED COMPLETE

(Convenient 2-foot sections base, brushing roof flashing, chinney caps.) Nothing class prested. Nothing size posted.

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## COMPLETE LINE of Wood Sectional Overhead DOORS

DESIGNED - Built and Proven to be the BEST!



The Finger Tip Control, outstanding beauty and moderate cost built into every Raynor door, regardless of size, means lasting setisfaction to the buyer and profit to the builder.



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Designed by Raynor engineers – built complete in the Raynor plant – when you sell and install the complete line of Raynor doors you are offering your customers the BEST in wood sectional overhead door equipment.

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... with every owner? We make 'em so we know... They use 'em-and they REALLY know. Power to spare, flashing speed, sustained, precise accuracy, nil replacement costs, weather protection, maximum mobility, newest design and innovations, best protection. All these facts make Comets the bright stars in the power saw field. Before you buy try Comets for proof. See the nearest Comet dealer or write us.

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COMETS and quickes

#### **Mass Production**

(Continued from page 91)

now that I could never come close to gaining the effects we have now. Take that flame red on the front picture window in the model home. That's just a little bit of accent color but we've gotten a lot of wonderful comments on it. Now, I might think of putting that color there, but I wouldn't do it. I wouldn't have the nerve. It sounds radical but it looks great. The same thing is true of the whole approach to color design. I've always used asphalt shingles, because of their color as well as for economy, ease of application and other reasons, but I never made it an absolutely strict rule to pick the roof color first and always to let the roof color set the tone for the whole house. However, that really works. He careful about picking your blended roof color and every other color fits right in.

"One of the biggest advantages of having color schemes planned for an entire development before work begins on a single house is that it permits contractors and subcontractors to do more bulk buying of materials and, as every builder knows, buying in large quantities means saving money. With a complete color planning job done in advance, exact amounts of colored materials, such as paint, can be readily figured in advance. It's another example of how detailed planning—with color as with precutting of lumber—costs less than doing it bit by bit as work goes along."

Among the other choices which buyers make, they particularly appreciate selecting their own wallpaper. All the rooms, except the bathroom, are wallpapered with the papers the buyer wants. Raymond manages this by arrangement with several home furnishings stores in the New Milford area. Shopping at any or all of these stores, the buyer chooses his wallpapers. He has an allowance from Raymond of fifty cents a roll. If the paper costs more than this, the buyer pays the difference. If the cost is fifty cents or less, the buyer pays nothing directly. Then Raymond gets the paper from the store and has it applied according to the buyer's instructions.

"Why not do it that way?" Raymond aska. "We're giving them nothing except choice—and that doesn't cost us anything."

For bathroom fixtures, the buyer chooses from among white and four colors—pink, blue, green and yellow.

For the custom-built, leatherette-covered breakfast nook set in the

kitchen, he chooses dark red, royal blue, green, brown, aqua, medium blue, gray, light blue, russet, chartreuse, medium, red, yellow, pink or ivory.

Each of the Raymond Ranch Homes has 1,044 square feet of usable living space, exclusive of the garage. There is a full-height basement under approximately half of the house. Walls and ceilings are fully insulated. Walls are plastered. Floors, except in the kitchen and bathroom, are oak. Plumbing is copper. Heating systems are forced air.

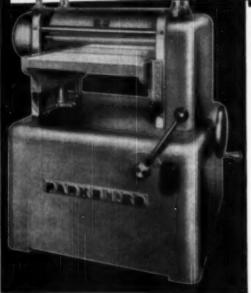
The minimum lot size is 75 by 100 feet. Some irregularly shaped lots are larger. Raymond is providing paved streets, sidewalks and curbing. All utilities are available.

To conserve space, the hallway connecting the bedrooms and bathroom was kept as small as possible. The hall includes a built-in linear closet.

The bedroom closets are equipped with floor-to-ceiling, sliding, louvered doors. Raymond says these closets are mothproof because "there's never a moth where there's light and air." The builder points out that he learned this from the manufacturer of a moth-destroying device.

Raymond takes particular pride in (Continued on page 312)

### The Sensationally NEW Low-Priced



### PARKS No. 20-20" PLANER

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality surfacer. The Parks No. 20 Planer has a four-knife cutterhead with a speed of 3600 R.P.M. and offers two feed speeds — 20 and 40 F.P.M., and 40 and

80 F.P.M. Write for complete descriptive literature.

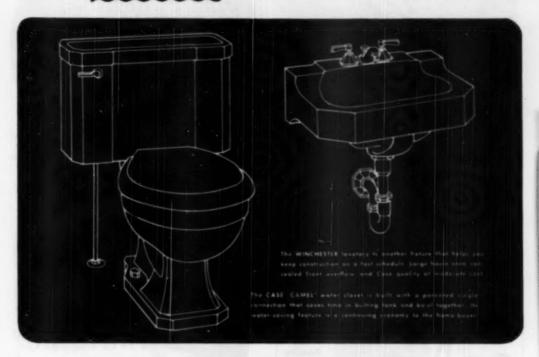
### The PARKS Heavy-Duty 12" x 4" Planer

A compact, sturdy, thickness plancy that offers mill planer precision and reggedness at a sensationally law price. Write for descriptive catalog sheet.



The PARKS WOODWORKING MACHINE CO., Dept.30-LL. 1546 Knowlton St., Cincinnati 23, O.

# SELECTED for faster building...



# INSTALLED for faster selling!

These Case fixtures of genuine vitreous china help to accelerate construction because easy and rapid installation is engineered into their design. Put them in and let them sell for you. Their qualities of style, convenience and easy maintenance are convincing demonstrations of the value that makes houses move fast.

Case quality lavatories and water closets are available in styles to attract buyers for homes of every type and price. Distributed nationally through wholesalers listed in Classified Telephone Directories. W. A. Case & Son Mfg. Co., Buffalo 3, New York. Founded 1853.



Vitreous China Plumbing Fixtures

### **MULTIPLY BY 57**

Five men assembled, positioned and fastened about 12 of these Rilco Arches per hour ...had all 57 up in less than one working day!

### ...to get the wrong answer!

Take a minute to estimate how long it would take six of your best carpensurs to cut, fit and assemble an arch like the ones used for the Lyman Lumber Company Warehouse at Wayasta, Minn. Now, multiply that by 57... because that's how many you'd need on this job. And, misser, that it a wrong answer... and it's even wrong-er when you figure the wage rates for six men!

But the right answer didn't take any figuring at all. The contractor specified Rilco Type 70 tied arches with a 44-foot span. They arrived in a freight car lifteen feet from the site. All the carpentry crew did was to assemble them, hoist them into position and bolt 'em down!

Rilco Trusses for practically any sort of commercial building come to the job complexely pre-fixed. Every bolt hole is drilled at exactly the right spot. Every piece of connecting hardware is furnished. And Rilco Trusses, glue-laminated under pressure, are stronger than most "on-the-job" trusses your men could build.

Don't run the chance of getting a wrang answer...
get Rilco Arches instead.

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### The Approved Garage Ventilation Equipment

Biandardized engineering complicity that lends perfectly to new warse buildings—efficiency, appearance, occuping of installation and slop working conditions. The method of exhaust gas pemoval used by "National" is recommended by health departments, instance companies, are proposed to meet the subject of the configuration of the conditions of the condit

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a years of productive No wonder the today, everywhere are over 39 models from which to choose. Write today for an informative, well illustrated bulletin

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Trouble Free STARLINE CANNON BALL DOOR HANGERS



### EASIEST TO STOCK -- EASIEST TO SELL -- EASIEST TO PUT UP

(No Brackets Heeded)

Starline Cannon-Ball Door Hangers roll like a ball in a self-cleaning track. Long roller bear-ings cannot pile up or wear unevenly. Factory lubrication protects from rust and insures fingertip operation. They have an even bearing on both sides of the slot, no matter how the building may warp or say . . . or no matter how the track is sprung or tilted. Storm Apron prevents storms from blowing in over top of door. Weather strip prevents rain, sleet and snow from washing down behind the door from above.



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that helps sell homes?



### **LUMITE\*** rustproof screens on every window increase buyer acceptance and satisfaction!

Long-lasting LUMITE screens are a practical, useful "extra." They're woven of durable saran plastic . . . guaranteed never to rust . , . never to stain sills ar side-walls. They're unaffected by salt-air, smake, rain or snow . . . never need protective painting! They mean years of care-free screen protection for your owners. Check the low cost of providing your homes with LUMITE screening!

> Sold by hardware, lumber, building supply wholesalers and screen manufacturers?

### FACTS FOR ARCHITECTS AND BUILDERS

Effects of Acids, Albalies and Salvants -Euserially none

Nex-inflammable - But softens at shout 240°F.

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e-Cut with and sers. Fold out edges under W. Tuck or stupie the screening smoothly and evenly every  $\mathcal{W}^{\ell}$ . Because of inhorant characteristics, LUMITE will ideally draw itself into a snug, form fit.



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### Bostitch TS Tackers DRIVE STAPLES IN WITHIN 1/16" OF INSIDE CORNERS

When a Bostitch T5 Tacker sticks its tiny nose into your business, you save time, money and work. It simplifies back-breaking ceiling jobs and close, difficult corner work. You just place the tacker, aqueeze the handle and the staple shoots all the way in. No missed shots, no marred surfaces, no bruised fingers! One hand free for faster, more accurate positioning. Try Bostitch T5 Tackers on your next paneling, insulating or metal lath job. You'll notice a big cost-cutting difference.

### Quick, easy way to

Attaching connerties becomes an easy one - handed job with facolitch 142 Solft-Peeding Hommers. The jost-right-length stoples facilities the metal lath securely to the pleaser hose without going through to the studs. This flaceting "fracked pleaser due to settling of the structure.



Application time out in half More and more readers are shifting to Bostich H4 Self-Peacing Hummers. No wonderf A flick of the wrist drives home a shardy hi' steple like a two-pointed nool. Ho smoothed forgers, no infected mouths. Long, one-are reach cuts down stepling needs. Cuts hours off new reading job.



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# ALDRICH Compact BOILER-BURNER UNITS

Here are compact, complete, packaged boiler-burner units in sizes for home and industry, for low-pressure steam and hot water heating and/or hot water supply.

They're economical to buy and use; easy to install in minimum space with a minimum of skilled labor. Six sizes in the Aldrich Series "B" Heat-Pak are rated at 118,000 to 808,000 BTU an hour...6 sizes for hot water supply with ranges of 125 to 850 GPH at 100 degrees rise.

All Aldrich boilers are available for either oil or gas firing with burners readily interchangeable.

If you buy, sell, specify, or install boiler-burners, write for information about Aldrich.

### The Popular New



### ALDRICH Bantam

### FOR MODERN LOW-COST HOMES

This outstanding boiler-burner unit, designed especially for the modern 4 so 5 room home, stands only 45" high, occupies 20" x 33" of floor space. Rated at 100,000 BTU, it can be adapted to steam, hot water, or radiant heating systems, and provides domestic hot water in excess of FHA requirements. Models also available for hot water supply only

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Skillfully engineered, precision-built for economy and trouble-free service. No radio interference from motors

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# ALDRICH



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the exact instrument you need from these three LOW PRICE MODELS

Finest 12" Dumpy Level available anywhere - gives you more features you want, more accuracy, more durability at less money than any other instrument. It has dust and dirt-free internal focusing and has coated optics for cleaver distortion-free, sharper images,



Here's the standard convertible level for the country for the past 50 years! No other instrument has the recognition and acceptance as given to the David White Carnegie Improved Convertible level, Now it's available to you with complete dust and dirt-free internal focusing and conted optics for clearer, sharper, distortion-free images.



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Yes, thousands of satisfied home owners are saying just that to their builders. Why? Because only with a Bilco Celladoor can they get complete convenience, plessure and full use of their basement.

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THE BILCO COMPANY 185 Hallock Avenue, New Haven &. Conn.

# Make your projects pay off these successful

Cash In on the sales success of these building projects! Equip your homes with the timesaving, worksaving, moneysaving advantages of the General Electric Complete Kitchen Package. Your houses will sell faster and you'll gain more prestige—as these delighted builders will tell you'll



"Everything for approximately \$65.00 a month — includes taxes, interest, and principal." That's what attracted and sold prospects who saw this Oman & Sons home equipped with a complete General Electric Kitchen-Laundey!

# in 10 days!"

arthur H. Oman

 Mr. Arthur H. Oman of ARTHUR OMAN and SONS, Brockton, Massachusetts, says:

"We sold all the houses in ten days, due to the right combination of houses and appliances. Tens of thousands went through the Model Hone... were favorably impressed with the complete line of General Electric appliances."

### "We sold 54 the first week end!"

A By

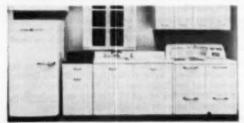
Mr. J. J. Carey of Hutchinson and Carey, Denver, Colorado, says:

"We offered three bedroom houses for 89850. The first week end we sold 54 and they have been moving steadily ever since.

"We feel that General Electric equipment contributed in a great measure to this successful operation,"



General Bectric range, refrigerator, automatic washer and ateel cabinets are included in the 89650 Hutchinson and Carey houses. Today any home buyer can afford a G-E Kitchen-Laundry.



"A low-cost luxury home with fully equipped General Electric Kitchen worthy of a 830,000 home." That's how Kensington advertised and sold 250 8990 to \$10,990 houses in 10 days."

### \_ "Sold 250 houses in 10 days!"

Wallen Brisker

 Nathan Brisker, President of KENSINGTON ESTATES, INC., Brentwood, Maryland, says:

"The phenomenal success of our project, in our opinion, is due to a soundly built house well planned, good financing, and the complete General Electric Kitchen. The public deserves better living in the lower-priced home!"

# சித்திருக்... just as builders do!!



"Sold our 67 houses the first Sunday!"

Cakalin

 Mr. E. A. Ballin of Hewlett Harbor Construction, Inc., East Rockaway, L. I., N. Y., says:

"Our model home was featured in national magazines and this sands visited it. The item which caused the greatest comment was the G-E Kitchen. We sold the entire development—67 houses—the first Sunday!"



In the Sallin Houses there are complete General Electric Kitchens! Today it's possible for you to offer General Electric Kitchens at a price any homosower can offerd!

The buyer of this Spurr Home cares on operation and maintenance of efficient General Electric appliances... often enough to cover the dight increase in monthly payments. "Sold not only the 40 houses, but 37 additional!"

dog apposance

 Mr. Mark S. Waggener, President of SPURR HOMES, INC., Denver, Colorado, says:

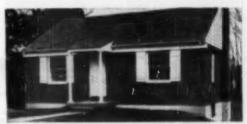
"We held open house for 3 days... sold not only the 40 houses under construction, but 37 additional on the basis of many factors in the house, particularly the General Electric Kitchen!"

"Sold 44 houses from 1 sample in 1 day!"

fue bless

 Mr. Ralph Talbott, President of the Talbott Building Co., Baltimore, Maryland, says:

"We produced a sample home here with complete General Electric Kitchen...advertised it one Sunday. At the close of business we sold 44 houses to be built at Lochearn." (A week later a total of 71 houses were sold!)



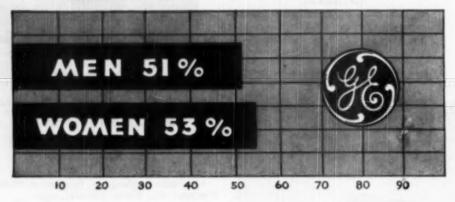
Included in each of the 160 Talbett homes are the following: General Electric dishwasher and sonk, 52-gallon electric water heater, electric range, Dispussib® and caloneta!



FESTAGIPA

# General Electric offers you merchandising

High national acceptance for General Electric equipment means faster turnover for your homes!



People prefer General Electric appliances to all other brand names combined!



Join in . . . make the #1 winner work for you!

National surveys show that your prospects prefer General Electric appliances over all other brand names!

You owe it to yourself to take advantage of this high consumer preference . . . a preference that helps presell year houses.

# a <u>Gompleiis</u> program!!

# 2 Include electrical living for as little as \$4.80 a month!

You offer your prospects the added advantage of complete electrical living when you include the G-E Kitchen Package in the long-term realty mortgage,

Everyone who can afford a home can afford an extra few dollars a month for a General Electric Kitchen! Further, the economical operation, low maintenance and long life of General Electric appliances may offset the slight increase in monthly psymental

# 3 Tested builder advertising and promotion plans!

Your General Electric distributor is ready to offer you a complete merchandising program, supported by tested builder advertising and promotional material . . . all designed to help you sell your homes feater.

Make the most of these tested plans that have helped so many builders throughout the country. Contact the General Electric distributor in your area.

# 4

### Architectural Consulting Service for you!

Visit the General Electric Home Bureau in Booths No. 74 and 75, and sit down with us at our coundtable. There will be General Electric planning experts there to talk with you about your 1950 projects.

Our Architectural Consulting Service, we believe, can be of great assistance to you in designing and improving kitchens and layouts for your houses!

You've all to gain by bringing your house plans to Chicago. However, if you can't be at the Convention, contact your G-E distributor, or just address a note to us and we'll see that you receive all the facts you need, Home Bureau, General Electric Company, Bridgeport 2, Connecticut.



You can put your confidence in-

GENERAL E ELECTRIC



### 4 BEAUTIFUL SHADES PLUS WHITE

Now it's color in cabinets—these Kitchen Maid Cabinets proved and approved so many years by architects and builders. Color that gives them more buyer appeal—gives you more latitude in planning and selection. Four beautiful shades plus white will spearhead the Kitchen Maid parada of features in 1950. Plan now to choose and use these outstanding cabinets at every opportunity. Capitalize upon the durability, the fexibility, the warmth and friendliness of wood. Write for valuable planning booklet sent free to architects and builders.

#### COMPARE THESE PEATURES AND YOU'LL AGGSE KITCHEN MAID IS TOPS



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tordwood fumilion

Look for this sign in year dealer's window, it signifies his shill as a member of the nation's oldest hitches planning arganisation.





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Please spind free bounted sometiming 10 practical bilintens with details. I am an a Architect, a Builder, D Desire.

Ba===\_\_\_

Just press a button...

... and open or close garage doors from within the car.

The new, improved CRANE "300" AUTO-MATIC DOOR OPENER with Magic Circle Remote Control brings home owners much added comfort and safety.

Engineered to perfection, highly efficient, designed especially for the 1-car garage . . . and amazingly low priced.

The CRANE "300" is simple to install, plugs into any light socket, no wiring necessary; and it operates very economically.

Write TODAY for Bulletin AB 250

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# HOW TO INSULATE

with

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COULS IN ORDINARY CONCESTS SONOLITE CONCESTS

With Zonolite Concrete Aggregate your radiant heat jobs will assure rapid houting, better respectature control, and important fast savings. Heat loss into the ground can be greatly reduced if you follow these simple steps.

On a level well-deained base propage a 5 or 6-inch fill of coarse stone or gravel, tamped smooth and firm. On top of this, lay a senseure harrier of one or more saturated feits.

Pour 4 inches of Zimolite concrete and allow it to set. Zonolite Aggregate replaces sand, in proportions of 1% bags of Zimolite Aggregate to 1 bag of portland commet, providing up to 16 times the insulating value of ordinary concrete.

Next the radiant host pipes or ducts are placed, and ordinary concrete poured to a thickness of at least 1° over the top of the pipes. A 2 x 8 sill involutes against lateral heat loss and octves as a carpot nailer.

Write us for full double on any concrete or plantering job where insulation is important. Send for valuable booklet, "ZONOLITE VERMICULTE INSULATION AND USHTWEIGHT AGGEGATES."

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- 1. Absolute Safety for workers
- Less time to erect, dismantle
   Increased job efficiency
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Why not up with the time and money wante of old-Inchlored confloiding. Let Bil-Jan Quick Action Scaffolding inreverse safety, efficiency and profits on every sift-the-ground job. Available on

a sale or restal basis.

Other Bil-Jan products: Scaffold Brackets, Waintenance Treather with and without lacking casters, Sectional and Lean-to-Ladders, Catalog and full information on request. Write...

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### Applied On-the-Job.

Prevents . .

Rot, Termites,

Warping and Swelling

Cuprinol treatment of wood has been found to materially aid the dimensional stability of doors, frames, sash and other fitted mill work. Pre-dipped wood when planed loses its dimensional stability, but application of Cuprinol to the planed surfaces will renew the original over-all protection.

### Wherever Rot Might Develop

For sills, parch floors and steps; for sawed ends and bolt holes; in dead air spaces; on any wood in contact with masonry or the soil—places where rot easily develops—apply Cuprinal. It is the original water-repellent naphthenate wood preservative, applied by brush, spray or dip right on-the-job.

#### A Perfect Bond Between Wood and Paint

Applied to the bare wood Cuprinol takes paint perfectly, and because it is water repellent it reduces the danger of cracking, blistering and peeling of the paint. It is non-toxic to handle, and Cuprinol treated wood is harmless to pets, poultry and plants.

Distribution is being much through lumber yards and other local autiets. If not yet available near you, send for descriptive price list to solect the type and quentity that you can use. In querts, gallens and larguer units.

CUPRINOL Division, Darworth Incorporated 36 Maple Street Simsbury, Conn.

# RUSCO Prime Window

(VERTICAL SLIDE)

THE FIRST practical, completely assembled, double-glazed, metal window unit at "multiple-housing" price...

Unit includes: glass, scree weather stripping, wood or metal surround, insulating sash<sup>a</sup> with built-in controlled This aret really practical and ventilation. complete window unit gives you and the bome buyer all the features each of you look for. You get the protection of a reliable manufacturer and supplier -- cost reducing ease appeal all for no higher price than you now pay. of installation desirable The home buyer enjoys a lifetime of trouble-free, smooth operation-year 'round, all-weather comfort, costnience and protection.

> ONLY RUSCO OFFERS THESE DESIGN AND CONSTRUCTION FEATURES

All working ports of tubuler, hot-dipped getvenized Armoo Inget Iran Zinggrip . . Sonderized and finished with baked-on outdoor anomal 6 No field pointing 6 Modorn, Lumite plastic screen siath 6 Weterproof felt weather stripping throughout 6 Autometic prowier-proof locking in all positions 6 Available without

telf-contained insulating sesh, if desired • All wood installation members are taxis-treated.



All screen and glass panels slip out from inside for easy cleaning.

in manufacturing and installing over 5,000,000 Rusco Combination Windows...is your assurance of the engineering and quality of Rusco Prime Windows.

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THE distinctive features of AllianceWare design and construction appeal to builders and home owners alike because they quickly realize AllianceWare is the sanitary-ware that steys young.

Made of formed metal, porcelain enameled with a stainproof, lustrous finish, AllianceWare possesses first of all complete rigidity coupled with exceptional strength. The steel used in AllianceWare tubs is a much heavier gauge than the minimum thickness allowed by Federal specifications for formed metal tubs.

A one-inch integral wall guard flange forms a ledge which permits the running of wall tile or plaster to the edge of the tub, thus providing a permanent water-tight seal of tub to walls.

AllianceWare tubs are readily installed by merely nailing

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Bathtubs . Locatories . Sinks

two vertical supports of the correct height to the studs with a horisontal member spiked between the verticals. According to F.H.A. requirements, this is the only method of installation which eliminates the effect of coatly shrinkage in lumber. Anchor lugs mounted to the tub hold the tub permanently in position against the wall.

You can select AllianceWare with the assurance of complete satisfaction for both yourself and your owners. Your plumbing contractor can give you full details of Alliance-Ware. Or write us for catalog sheets.

AllianceWare

### You'll find many a job for this

### WELDWOOD LUMBER STAVED CORE DOOR!

There are many applications

- . . . Residential, Commercial, Institutional
- ... for this new flush Veneer Door

Many of your customers are looking for just exactly the door you can offer them with this newest addition to the Weldwood line.

The solid lumber core provides a satisfyingly "solid" feel. It also means you can hang the door from either side, and it's especially adaptable to custom-cut lights and louvres. Hardware goes in quickly, easily, permanently.

All bonding is done with 100% waterproof phenolic glue, so that you can safely recommend this door for either exterior or interior use.

These new all hardwood Weldwood Doors are furnished with faces of richly figured hardwood veneers in all the popular species. Made in a wide variety of standard sizes; thicknesses: 1¾" and 1¾" from stock, also available in 2" and 2¼".

In short, the Weldwood Lumber Staved Core Door gives you an opportunity, to offer customers a quality product that combines convenience and easy working with versatile, durable, trouble-free beauty.

Your lumber dealer or nearest Weldwood branch or distributing unit has complete information on this new Weldwood product. Get complete details today.



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Distribusing units in Albany, Bultimore, Bustone, Brooklyn, Buffalo, Chicago Carcinnati, Cleveland, Denruir, Frenno, Gleendale, Harrlord, High Foint Indianapolis, Niw Hyde Park L. L., N. Y., Lea Angeles, Milwanket, New York, Oakland, Philadelphia, Pitribusgh, Portland, Ore, Richnood Rochesser, San Francisco, Seattle, Spokone, St. Peal, Washington, D. C. Alie U. S. Mengel Flywoods, Inc., distributing units in Arlanca, Birmingham, Dallies Housston, Eckonowille, Kannac Cire, Kona, Lonisville, Memphis, New Oxicons San Astonio, St. Louis, Tampe, In Canada: United States Plywood of Canada Chanisol. Tomosto. Send insuries to necesse maint.





# Look-Ahead builder E. G. Taylor features BENDIX WASHERS IN NEW APARTMENT DEVELOPMENTS



## "Better living" bonus is standard practice with this foremost Richmond contractor

Scores of units completed and occupied, and more a building . . . with a Bendix in each kitchen. That's because Mr. Taylor knows that the female half of the househunting family has a big influence on the decision.

To her, the idea of less work on washday has plenty of appeal. To her the name "Bendix" means more than any other. To the builder that's a selling point that keeps homes rentable or saleable in bad times as well as boom times.

That's why more and more builders are including the Bendix automatic Washer and Bendix automatic Dryer in their plans... and in their packaged mortgages. To the buyer, the extra cost is only a few pennies a month. To the builder it's extra dollars in profit.

Write for details of our special builder discount plan. Bendix Home Appliances, Inc., South Bend 24, Indiana.

### Come see us at the Builders' Show!

Our Welcome mat will be out in front of Booth 15, Exhibition Hall, Stevens Hotel, February 19 through 23, Men who "talk your language" will be on deck to answer your questions and show you the world sfavorite line of automatic home laundry equipment.

BENDIX

automatic

Home Laundry

WASHER DRYER IRONER

#### NEW BENDIX AUTOMATIC WASHER

No space-stealing set-tube needsed when you install the only washer in the world that can soap, soak, wash, rinse and dampdry—all by itself. Reversible door available on all models. The Bendix with its smooth, flat top provides an extra working surface...

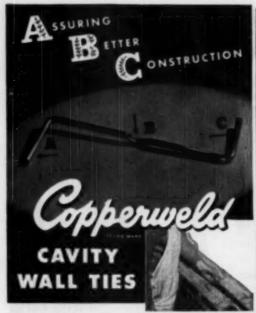


### NEW BENDIX AUTOMATIC DRYER

A "Box of Sunshine." No clothesines clutter up yards when your houses are equipped with Bendra automatic Dryora. Compact, space-saving. Fluff-drys a whole washer load of clothes in minutes. Heversible doors on all models to make your space planning simpler. Exclusive outside



venting. Gas or electric models available,



You can build extra security into your cavity wall structures and give them everlasting strength by installing Copperweld\* Wall Ties. Leading architects and builders rely on Copperweld Ties to provide a permanent bond for the entire life of the wall. And here's why:

Thick copper covering, inseparably welded to an alloy steel core, prevents rust—withstands corrosive action of time and mortar.

V-shaped drip loop drains off any moisture which might accumulate—prevents moisture from reaching inside wall.

Strong alloy seed core assures a breaking strength of nearly 2 tons—a strength which remains permanent because of the protective copper covering.

### AND DON'T FORGET THESE-

Time-tested Copperweld Nails and Staples will help you do a better construction job. They are strong, easy to drive, and non-rusting.





Can't Buy a Better Many-Purpose Saw because only Guild offers so many quality features at the price . . . Cuts Faster; there's speed and power in that 2000 rpm motor. Handles Easier because it's extra light, superbly balanced. Performs More Smoothly, thenks to helical gear drive. Perfectly Accurate with cutting line always visible. Extra Safe; guarded, balanced for safe starting, cutting and finishing. More Durable, thanks to Balanced operation plus sturdy, polished aluminum housing. Adjusts Easily from 1/4" to full 2" cut. Blows Sawdust off cutting line — away from motor. Does Everything; saws, rips, ploughs, dadoes, cross cuts, grooves — works on lumber, plywood, plastic, composition, asbestoe board, tile, even light metal. Numerous attachments available.

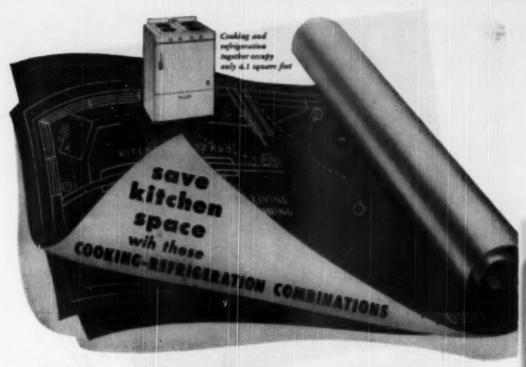
to increase its application. You'll be satisfied --- plus!

The Guild A-6 has proved thousands of times that it's mighty useful to have around the job. Convince yourself — watch it perform at your Porter-Cable dealer's today.



PORTER-CABLE MACHINE CO 3023 N. Selline 31. Syracose N 7 Manufacturers of SPEEDMATIC and GUILD Electron Trans.

In Consde (secopt B. C.): Write Strongroups Ltd., St. Catherines, Ont.





ALL-ELECTRIC GENERAL CHEF

Four cubic foot General refrigerator with vogetuble bin, and three-burnet electric cooking combination. This is the 220-volt model, with one 2150-watt and two 1000-watt burners. Also available in 115-volt model, with two 850-watt burners, to plug into any household line—one plug for range and refrigerator both. All burners are solid closed T-K units. The top removes for easy cleaning on both models. Dimensions: 39" height; 27-1/2" width; 23" depth over handle.

General Chef combinations make kitchens practicable in small space...at low cost.

New flexibility for the architect and builder is provided by General Chef cooking refrigeration combinations—for motels, hotels, apartments, resorts, cabins, small homes, guest houses, bars, offices, hospitals, etc.

General Chef quality and performance are first class. Thousands have been produced — all well-made, attractive units with triple chromeplated hardware, hermetically sealed Tecumseh compressors, 7-station temperature control, and high-quality burners.

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#### GAS-ELECTRIC GENERAL CHEF

Four cubic fivot General refrigerator with vegetable bin, and four-burner gas cooking combination. The full-size Lincoln Brass burners use natural, manufactured, or L-P gasea, and are easily removable for cleaning. Dimensions: 39" height to top of grates; 27-1/2" width; 23" depth over handle.

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Please send me your dats file on General Chef cookingrefrigeration combinations. Include specification data on the complete line of General refrigerators.

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.. FLINTKOTE'S Sensational

New Developments

in Interior Insulation

Board Products!

### LETH-R-GRAIN INSULATION BOARD

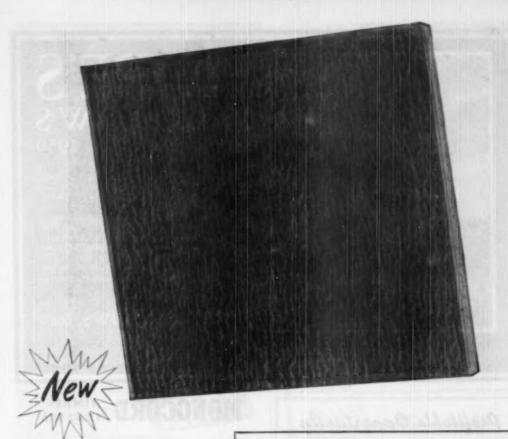
adds even more versatility to this popular, low-priced product for interior finishes.

Get ready for increased business . . . as soon as you begin showing customers this spectacular new Flintkote development.

With a rich, simulated leather finish that closely resembles fine split cowhide... Letb-R-Grain Insulation Board is just the thing to spark up interiors of dens and recreation rooms with eye-catching beauty at pursepleasing prices.

Recommend it for wainscoting, decorative panels or overall wall treatments. The big panels, 8 foot long in 3' and 4' widths, go up quickly and easily . . . and do the three-forone job of providing structural walls, insulation and striking decorative beauty all at once!

The new Leth-R-Grain Insulation Board is available in morocco red, antique brown and jade green . . . and has a rugged, washable, scuff-resistant finish that combines years of serviceability with that luxury look that customers love. And you'll find commercial properties excellent prospects, too. So don't fail to take advantage of the business opportunities that are yours with this versatile new Flintkote Product.



### TEXTURED DESIGN

in two striking colors brings new decorative beauty to Insulation Board Plank

And here's the newest thing in an old favorite. You know how well customers received Flintkote Insulation Plank when it was introduced. Well, show them this new Textured Design . . . and then watch the result.

We call these two new numbers Gray-tex and Green-tex. This new finish gives this popular material an arresting beauty for use in a variety of interiors.

Like all Flintkore Insulation Board Plank, these two new products have blind nailing joints for fast, neat installation AND the Flame Resistant Surface Finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.

Don't fail to tell customers about both these sure-to-be-popular numbers right away.

THE FLINTKOTE COMPANY **Building Materials Division** 



### AND ALL THE OTHER PLINTKOTE INTERIOR INSULATION BOARD PRODUCTS HAVE EXCITING NEW IMPROVEMENTS!

FLINTKOTE SOUDING SGASD IS AN OCCU ical insulating and proctural board 4' wide, available in a number of lengths. The factory-finished White surface can be painted without priming, or installed without further treatment. Plame resistant surface finish conforms to U. 5. Dept. of Commerce Commercial Standard CS42-



FINTEDTE INSULATION THE BOARD comes in 4 sizes and 4 colors (White, Green, Gray and Decoblend . . a pleasing blend of coral tones). Blind nailing joint insures a nest installation. Flame resease surface finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-69

In addition to the same colors as the Tile (above), FLINTROTE INSULATION BOARD PLANS (above), Particular measures of the control of the



LINTKOTE ... the extra years of service cost no more!



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# HOPE'S WINDOWS

1818 The Name Guarantees 1950

In this southern systement outleing, the broad exies shelter the windows from the associaty sun and the wide-opening HOFU'S STEEL CASE MENTS give full ventilizing.

In a nisthera building, the parfect operation and fix of HOPE'S WINDOW'S would be valued for their weathering to project a from a lil winds and a both north and would, owners report that maintenance costs are the lowest over experienced Builders, too, and that Hippe's Windows are not expensive to mistell as compared to other construction of compliable quality.

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famestown, N.Y.

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

# Profitable Opportunity for men with construction knowledge

You can build a good business for yourself by providing termite control for your customers and other home owners. Write us now for full information.

The ANTIMITE System has been nationally recognized as a Leader for over 20 years in scientific termite control . . . scientifically engineered and planned to aid our operators in developing the highest degree of efficiency and permanency in termite control.



### WRITE TODAY For Available Franchises!

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### MONOCORD TRUSSE



### FOR CLEAR-SPAN, POST-FREE BUILDINGS

FAST ERECTION WITH LOCAL CREWS AND EQUIPMENT

♠ Monocord Timber Trusses are designed, engineered and factory-fabricated to meet all job and load requirements. They are delivered knock-down, ready for accurate assembly and easy erection by local crews and equipment. Monocord Trusses enable you to economically meet the growing demand for one-story, post-free buildings.

In addition to Monocord Trusses, Weyerhaeuser furnishes other typical fabricated lumber items to general contractors, builders and industrial builders.

TRUSSED RAFTERS + BRIDGE TRUSSES + MATCH COVERS + PALLETS +
HIGHWAY BRIDGE BARRICADES - PLOATS - REFRIGERATION SHIP
PARTS - STRUCTURAL FRAMEWORK - STEAM HAMMER PARTS
- CHURCH TRUSSES - LOADING RAMPS - PILE DRIVER CRAWLER
MATS - BUMPER BLOCKS - POUNDATION TO WERS - GAS CYLINDER
RACKS (Ireated) - FILIAE CRADLES (Ireated) - COOLING TO WERS
(Ireated) - MARRIE FIRE TIMBERS (Ireated) - WATER GATES (Ireated)

Write for complete details.

### WEYERHAEUSER SALES CO.

NEWARK, N.J. . ST. PAUL, MINN. . TACOMA, WASH.



Compare before you buy-for here is the hest money-making for contractors ever built!

The Wallace No. 1 Radial Saw is specifically designed for you. It is trailer-mounted, for portability. Exclusive lator for rafter sawing alternately cuts place and plumb angles with one set-up and one handling of material.

High spindle speed gives faster, smoother saw cuts—better dadoing, shaping, rabbetting and cabinet operations. Write for free bulletins-also inquire about our universal asws, jointers, bandsaws, shapers, mortisers, dowel-borers and other tools.



J. D. WALLACE & CO. 136 Se. California Ave. Chicago 12, III.



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 Let me show you how you can cut guesswork out of **building** estimating

Hazards of competitive bidding have been reduced to for thousands of contractors now successfully using my simple factors in preparing their cost estimates on materials and labor, I want to become your "silant consultant" by placing at your ollow, for immediate reference, the boiled down assence of my 40 years' experience - expressed in simple factors that require only the application of your local wage and material roles to arrive at a competi Gordon H Vamblyn

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As a rander of this publication we are warranted in sending Impaction period, you may mail it back or pay \$38.75 in easy monthly payments. | Address.

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the 6" Sow with "Big Sow" Features

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Powerful, Heavy-Duty, Light-Weight (12 lbs) Saw. For Right or Left Cutting.

New high quality Maliflaw necurately cross-cats, tips, angle, and hevel cuts form beards, framing, and totes. Blades available for dashing, growing silv, transies, concrete, and cutting light gauge metals.

Makes straight cuts up to 5 inches in rough or dressed himber, 11/16 minimum with depth al-lustment; 45-degree bevel cuts to 11/16 inches. Aluminum and magnesium tilty beauing makes it light and casy to handle. Available with right or left blade with 115V or 230V AC-DC meter. 866.43 without Bevel Shoe Areachment.



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Class everything from wood to stool. Makes straight cuts up to 2" in dressed lumber, and 45degree hevel cuts from 5;" to 1-11/52". Available without herod-depth show of \$54.95. Six other models with 25;" to 45;" outling expectites.

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have proven profitable restal equipment. Completely forligeral—can'l laive operator or the work—built for heavy production and tough rentel see. Easy's trouble-tree performance moles, rented continents come book, we apperlanced operator or he gives only our majorance costs and head-others. Easy, built by experience for experience dependence or beginner, dependence for years!

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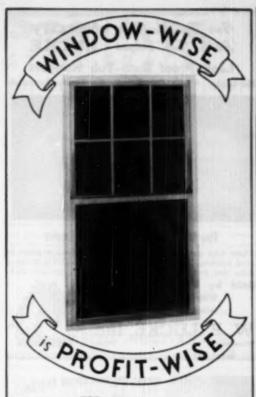


Easy is tops for excelling multipard apairs planter patches and business of other runs customer jobs.

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The ALL NEW METALART heavy extraded Aluminum Bouble Eung Window for residential construction combines beauty, strength and low cost. Your choice of spiral balances or tape balances, factory glazing with Meoprone Bead Glazing or job sits compound glazing, full-framed Screens or sconomical Tension Screens, plus all stainless steel weatherstripping and hardware.

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Cuts installation time

Now you can tension either before or after installation. Hidalift balances offer you a choice.



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by twisting bracket arm to desired tension.



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eisher the cup or "L" type by simple adjustment of the exclusive tensioning screw with screwdriver.



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NEEDED . . . Seve installation time — expense. Both "L" and cup type attaching brackets available for your special convenience.

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# DON'T LET ROT AND TERMITES ENDANGER YOUR GOOD REPUTATION



WOLMANIZED Pressure-Treated Lumber stops costly damage due to wood decay and termites. It gives your

customers better construction and prevents trouble that neither you nor building owners want to experience.

WOLMANIZED Pressure-Treated Lumber provides SURE, LASTING PROTECTION. Preservatives are driven deeply into the wood fibres under high pressure—not just brushed on.

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- Where steam and vapor from industrial processes promote wood decay.
- Where walls, floors, ceilings are subject to condensation from retrigeration.
- Where wood is exposed to moisture in humidified buildings or form buildings.

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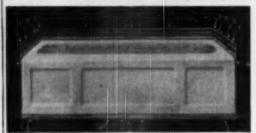
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# For Trouble-Gree | Specify Bath Tub Edges | LUCKE

Leak-Proof Bath-Tub Hangers
No Leaks \* No Cracks \* No Repair Expenses



### The Modern Way to Prevent Leaks

There is no excuse for cracks or leaks or repair expense in good building. Leading architects specify LUCKE to overcome this problem. Lucke Hangers build tubs into wall.

### Sold by Leading Plumbing Supply Houses

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## USE Bostwiof ... SAVE ON LABOR AND COST OF MATERIALS

Bostwick Metal Casings are made of warp-proof metal, perfectly shaped for easy application around doors, windows and other wall openings.

Use of Bostwick Casing saves you time and money by eliminating tedious and unnecessary steps like sanding and wood finishing, and they are readily formed to perfect mitres.

Bostwick Casings result in a better finished job that's smoother, more spacious looking and much easier to sell.

Best of all, Bostwick Casings actually cost less than wood — both in construction time and in cost of materials!

So don't delay. Consult your dealer today for complete information on Bostwick's entire line of easier handling metal lath and metal lath accessories.

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### STA-LITE STEEL BRACES for bridging wood joists



- Save Time
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Sta-Tite Steel Bracus are mode of half hardened channel steel with flanged ends that hold firmly so floors can't buckle or bulge. Metering, sowing, nail storing not needed. Flange ends firmly wedged and permanently locked in position by a hommer blow. One small noti through such end quaruntees firmness. Braces can't split or werp, Nested 100 in a box 315"x315"x18".

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Here is the metal tile that is easily installed on existing walls or ceilings without expensive alterations or disconnection of fixtures. On new construction VIKON TILE permits economically erected walls or wall boards to be used as a satisfactory base. Can be applied over any smooth surface. Recommend Individual Vikon Metal Tiles, your guarantee of client satisfaction.

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\*"The Original Individual Metal Tile" Established 1926, See our catalog in Sweet's Files

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| ADDRESS |                  |
|         |                  |

### **Mans Production**

(Continued from page 286)

the kitchen plan. He calls attention to location of kitchen at one end of the house. This is intended to give the housewife easy supervision of alment the whole interior while she does her kitchen work. Through one archway, she can see into the living room and part of the bedroom hallway, Through the other hallway (if her house is the dining room model), she can see into the dining room, into the rest of the hallway and into one bedroom. From the front kitchen window, she can see the porch and the front yard. From the renr window, she can see into the lack yard. Through the window in the outside kitchen door, she can see part of the yard at one side.

Standard equipment in each kitchen is a range, cabinet sink, cabinets, washer and the breakfast nook set. Size of the kitchen is ample for informal meals.

Architect for the Raymond Ranch Homes development is Fred J. Roughgarden of Hawthorne.

Interior decoration of the model home was done by Mrs. Raymond, who also is doing other interior decoration for which the builder is responsible

### \$2,400 Two-Bedroom Houses, Owner-Finished, Produced by Fort Worth Builders

A Fort Worth, Texas, building firm, O'Neal and Foster Construction Co., is producing two-bedroom homes at the rate of two a day and selling them for as low as \$2,400, with no down payment and \$30.33 monthly



ONE of O'Neel and Foster's low-cost

payments. The firm has produced more than 400 homes in the last two years in Fort Worth and is now operating in Dallas and San Antonio, where two additional houses are being produced daily in both cities.

O'Neal and Foster make two types of homes, both having two bedrooms. The smaller one is 20x28 feet and the larger 24x28. Each has living room, kitchen with ample dining area, bath,

hall, two large closets and a small one. Each contains wiring, partitions, unfinished dry wall application. exterior doors, windows, interior trim around doors, and base. Each is a finished house except for plumbing, interior textoning and painting, floor sanding and finishing and interior doors. The firm believes that many owners prefer to make the finishing touches themselves.

The smaller house, if placed on a lot and foundation furnished by the purchaser, is sold with no down payment and \$30.33 monthly payments. The larger, under the same circumstances, requires \$200 down and the same monthly payments. If the firm furnishes the foundations there are down payments of \$150 on the smaller and \$350 on the larger.

A teclmique developed in the production of the homes was begun by M. L. O'Neal two years ago with a capital investment of \$500 in saws. a stock barn, and forms; and these are still the principal components of the company's operations. The forms, built by O'Neal himself, speed production of wall sections and so simplify construction that most of the homes are currently built by student labor from a nearby theological seminary.

The construction crew consists of (Continued on page 314)



### INCREASE PRODUCTION 100% with KEN Corner LEVEL

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### Save time, labor and **CONTRACTORS!** expensive lumber

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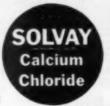
### **END ICE HAZARDS**

- DRIVEWAYS
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### RED DEVIL TOOLS, IRVINGTON 11, N. J., U.



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### FIREPLACES

Lends unsurpassed beauty and The modern freplace that fulfile all modern day requirements — used with gas or electricity.

Large variety of attractive models in brick, stone, wood, etc., available.

Purnished complete-ready to be installed in hour's time of handy man-shipped anywhere.

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### PRECISION folding stairway

- No springs-Actuated by counterweights
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### earns \$100 a MONTH in spare time

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### FOR YOUR INSPECTION

BLAVENS APARTMENTS, 806 State Street, Bettendorf, lowa, Cost approximately \$225,000. 28 modern apart-ments, each with 3 or 4 roughs and opparato gan heating systems. All apartments completely Kitchen-Kraft equipped by Onthank-Davidson Company, distributors.



### "ONE OF THE SMARTEST THINGS I DID WAS TO INSTALL KITCHENS,"



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"You're got to build apartments and homes to please the average woman,"
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The Slavens Apartment building is just one of hundreds of apartments and homes where Kitchen-Kruft Kitchens are winning admiration from prospective owners and renters. Kitchen-Kraft fits perfectly into your building plans - no matter what style or size kitchen you have in mind. All sizes of cabinets, fillers of standard specifications from stock to fit any space. Kitchen-Keaft Kitchens make homes easier to sell , , , apartments WRESET TO PROS.

PROMPT DELIVERY OF ALL RITCHEMERAFT EQUIPMENT ASSURED. SEND TODAY FOR PRICES AND LITERATURE.



MIDWEST MFG. COMPANY . GALESBURG, ILLINOIS

#### \$2,400 Two-Bedroom

(Continued from page 312)

10 nen, all common labor. Studs, ceiling and floor joists and all dimensional timber are cut according to a standardized plan. Studs and plates are placed on a form constructed of San timber, and nailed. Entire wall sections are built at once, siding added, and the gables finished simultaneously. In the meantime, another man cuts rafters and ceiling joists and another builds windows. All the component parts of the house are made at the mill and transported to the building site where a foundation has been poured and is ready for raising the wall sections. Floor joists and girders are laid, wall sections put up, rafters and gables added, windows put in and the roof decked.

Up to this point, it has taken 10 men three and one-half hours to make the various components of the house and four hours to set up the skeleton, a total of seven and one-half hours. The completion of the house is subcontracted to one man, who applies composition shingle roofing. Lays the oak flooring, puts up interior walls and trim. Normally, two men can finish three houses in one week.

### Artist's Drawings Help Builders Sell Homes

A young Los Angeles artist, R. C. Qvale, has built a business for himself by helping builders self houses with the use of his art work.



THIS DRAWING, originally in full colors, is typical of the work produced by R. C. Graie and Associates for nation's builders

Qvale, who had been making delineations for architects and larger builders, decided that this was a service almost any builder could use. His solicitations among small builders led to the establishment of a mail order business that is now nationwide.

The procedure works like this: A builder sends Qvale a floor plan and an elevation of the house of which he wants a drawing. The artist, in turn, furnishes an 11 x 18-inch drawing in full color viewing the house from its advantageous angle. Lawn,

trees, trim, shutters, and other features are accentuated in the art work. The cost of such a drawing is approximately \$50. Glossy prints of it for advertising purposes are provided at 65 cents each.

### Murray Corp. Host to Press



EXECUTIVES of the Murrary Corposotion of America and the Home Appliance deviaion. Scranton, Pa., were recontly bests at a trade press preview of new home appliances being introduced by the firm in 1910. Discussing features of the new range are from left), R. C. Gould, Murrary Corp. president; H. C. Bereslard, Home Appliance Division sales manager; C. H. Mosep, vice president in charge of sales. Marrary Corp.; and T. W. Hardy, Murrary vice president in charge of the Home Appliance Division.



Here are two mixers every builder should own. They speed up work, save many man hours a year and are known everywhere for their quality and rugged construction. See your CMC distributor or write for catalogs.



Mixes cement, mortar, pulent planter with hair or fibre. Has renewable long lasting dram linere—for astru years of service. Triple mixing hose. Sented Timken bearings on both bosond lack shafts.





WONDER 3½ TILTER. The original and still the greatest value in small job mixers. Quality construction featuring Figure "8" mixing action. Quickly spetted onywhere, as shown in above photo. You know this mixer and can buy it with assurance it is the best in the field.



### 10 Day Trial No Deposit

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### SAVE A DAY or more staircase you build

### ELIASON STAIR GAUGE

In 19 encembs gives you BOTUs correct learners hard respire of significance, risers. Such red growth and service and you Like ST OR 4 48 CL.E. Adjournable trees 20° or Saven A Company of the Company of the Company of the ST COMPANY OF THE COMPANY AND COMPANY OF THE COMPANY OF





ELIASON TOOL CO. 310 E. 500 St. M



#### E-Z MARK BUTT GAUGE HANG THAT DOOR THE PROFESSIONAL WAY



Makes a clean-cut deeply etched profile. Remove chips. Repeat on jamb. Hang door!

Comes in F', Fij" and 6" (5hd.) sleet. If dwafer can't troppin, send only \$1.60 with order, pay poolman balance plus postege C.O.D. in Canda, 25, higher per order, No C.O.D. Stote slees wanted.

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EXTENSION LABOURS -- Top crongits design and construction. Spage and arm test rung braces, automotic safety haves upe and pulles. In sices from 20 to 5.7

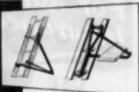
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SAFETY PLATFORM LABOUR led for general west with wide influre, rung back, steps know raced and truss radded. Sices to 16" (height of piotform).







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Write for ladder bullatio, "Invest in Safety and Economy"

for Greater Safety . . . Efficiency . . . Economy THE PATENT SCAFFOLDING CO. Inc.

# Mix 12 to 15 more yards a day with JAEGER 31/25 "AUTO-LOADER"



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and make lifelong friends

Applications of THOROSEAL may be made over exterior surfaces of foundation walls as work progresses.

THOROGEAL, to seed the surface, and QUICESEAL Finish Coats are substantial and beautiful.





STANDARD DRY WALL PRODUCTS
BOX X NEW EAGLE, PENNSYLVANIA

### BOCA-Code

(Continued from page 105)

Conference and Southern Building Code Congress. This movement toward standardization of building codes should not stop until all are reduced to one workable uniform code applicable to every city, town and village in the nation.

This is not an unreasonable thought when a few simple facts are considered. Pure water is pure in every community. Fire is the same regardless of location. Materials are exactly the same no matter what their eventual destination night be. Sanitation and safety are basic. Only people and their thinking are different—and that is the main problem. If we can change attitudes, we will have the solution.

Home builders are expected to produce about 1,000,000 new houses in 1950. At a conservative average cost of \$7,500 per unit the grand total is \$7,500,000,000. The best engineering and code authorities in the nation estimate that the BOCA standard code can save at least 5 per cent in building costs. This would mean a saving of \$375,000,000 to home buyers in the United States without any sacrifice whatever in safety, sanitation, permanence or healthful living.

### Doorway to YEAR ROUND PROFITS

EVERY DOORWAY IN YOUR TERRITORY OFFERS POTENTIAL SALES POSSIBILITIES

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Prevent shappy, alignory purches, bely avoid serious accidents; keep stormy weather out of doorways and halfer, add beauty and distinction to any home or building. Built of 1000 gauge sirecost elements: . . . se dissipued that strong interducking segments fit easily into any door opening. Will not say, read so curvoide. As vents in side give adequate ventilation. As atlable in choice of 7 structive outer considerations or model colors. Lustrous enamel fiscile in permanently bonded to the motal before forming. Will not crock, older

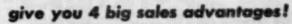


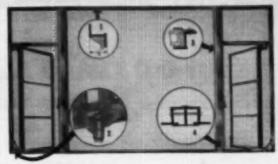
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- PULL 11/6" SECTIONS—Available only in Alconco . . . structurally stronger. Purty retaining gracers built into each section and designed for easy outside gloating. Assures a firm bond of purty to aluminum, eliminating breaking and cuttlesp purty.
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Clean superior workmanship is apparent throughout. There has been no stinting on materials or fabrication methods to make the finest all aluminum cosements by Alcasco.

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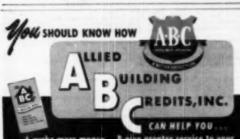
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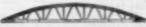
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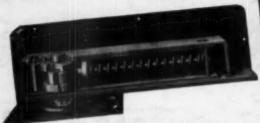
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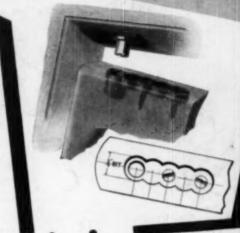
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